



# ST. LOUIS DISTRICT MOBILITY

JANUARY/FEBRUARY 2017

## GUIDEPOST

- FREEWAY MOBILITY CONSISTENT IN BOTH PEAKS FROM PRIOR MONTHS
  - NO MAJOR OR MODERATE WORK ZONE IMPACTS IN JANUARY OR FEBRUARY
  - AVERAGE INCIDENT LANE CLEARANCE IMPROVED BY 3 1/2 MINUTES FROM DECEMBER 2016 TO FEBRUARY 2017
  - GATEWAY GREENLIGHT CITIZEN SURVEY RESULTS INCLUDED IN THIS REPORT
- NEW FOR THIS REPORT:
- NEW FREEWAY MAPS FROM RITIS
  - HEAT MAPS REPLACED CONGESTION CHARTS FOR FREEWAYS
  - AVERAGE 24 HOUR VOLUMES NOW INCLUDE ALL SL DISTRICT URBAN FREEWAYS INCLUDING ROUTE 364 FROM I-64 TO I-270, ROUTE 367 FROM I-270 TO ROUTE 67, AND ROUTE 370 FROM I-70 TO I-270. FOR 2017 THESE FREEWAYS ARE INCLUDED IN THE VOLUME CALCULATION AND SHOWN FOR TRENDING PURPOSES ONLY.



MOTORIST GIVE RESPONDERS ROOM TO WORK BY OBEYING THE MOVE OVER LAW. MOTORISTS ARE ENCOURAGED TO REMAIN AWARE OF EMERGENCY RESPONDERS AND THE UPCOMING WORK ZONE SEASON. FOR YOUR SAFETY AND OURS CONTINUE TO GIVE THOSE ON THE ROADWAY ROOM TO WORK!

## MOBILITY SNAPSHOT



### **FREEWAY MOBILITY**

JANUARY TO FEBRUARY COMPARISON:  
AM IMPROVEMENT / PM IMPROVEMENT



### **MAJOR INCIDENTS**

JAN 2017: 4 → FEB 2017: 4



### **AVERAGE INCIDENT DURATION JAN → FEB**

LANE CLEARANCE: 27:39 → 25:52  
INCIDENT CLEARANCE: 32:06 → 29:06  
(MIN: SEC)



### **MAJOR IMPACT WORK ZONES**

JAN → 0 FEB → 0

### **MODERATE IMPACT WORK ZONES**

JAN → 0 FEB → 0

## ZONING IN

### **TMS WORK ZONES**

- ◆ JANUARY 2017: 148
- ◆ FEBRUARY 2017: 187

### **WORK ZONE BREAKDOWN:**

- ◆ MAJOR: 0 - 0.0%
- ◆ MODERATE: 0 - 0.0%
- ◆ MINOR: 335 - 100.0%

WORK ZONE CRASHES: 6



GATEWAY GUIDE  
TRANSPORTATION MANAGEMENT CENTER





# WORK ZONES

TMC Observed Work Zones January - February 2017			
January		February	
Level of Travel Time Impact	Number of Work Zones	Level of Travel Time Impact	Number of Work Zones
Major Impact	0	Major Impact	0
Moderate Impact	0	Moderate Impact	0
Minor Impact	114	Minor Impact	132
Total	114	Total	132

\*Impact Levels described in Data Key

#### SL Mobility Rating:

- ◆ Jan 2017: 94%
- ◆ Feb 2017: 98%
- ◆ Goal: 91%

#### SL Visibility levels:

- ◆ Jan 2017: 99%
- ◆ Feb 2017: 96%
- ◆ Goal: 91%

**Major Impact** (15 Minutes or Above Additional Travel Time)

\*\*\*None\*\*\*

**Moderate Impact** (10-14 Minutes Additional Travel Time)

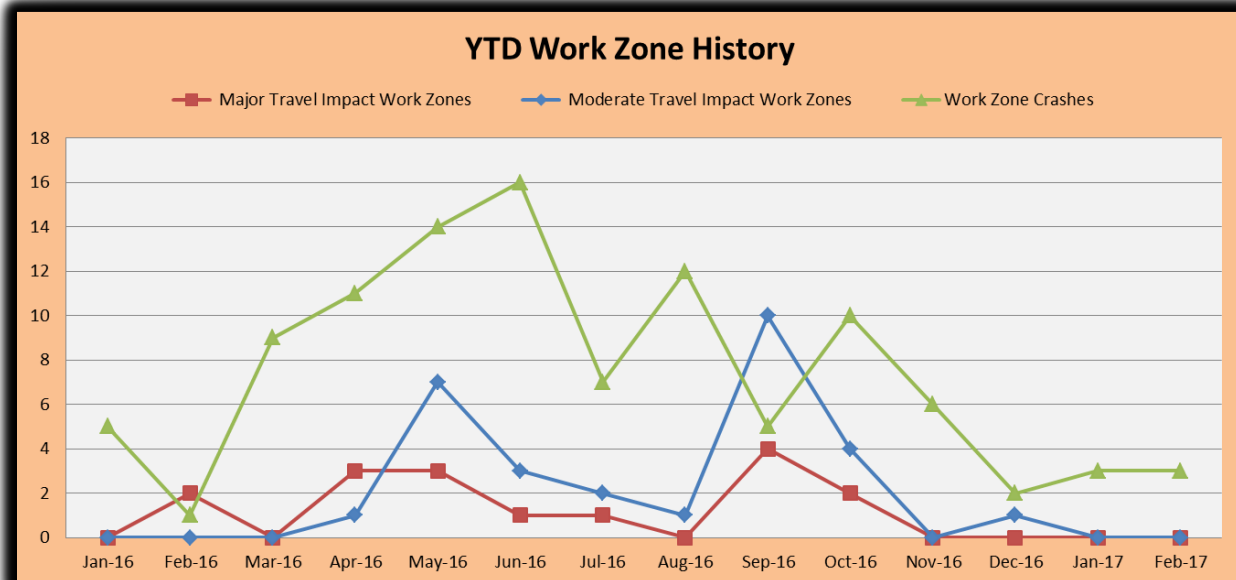
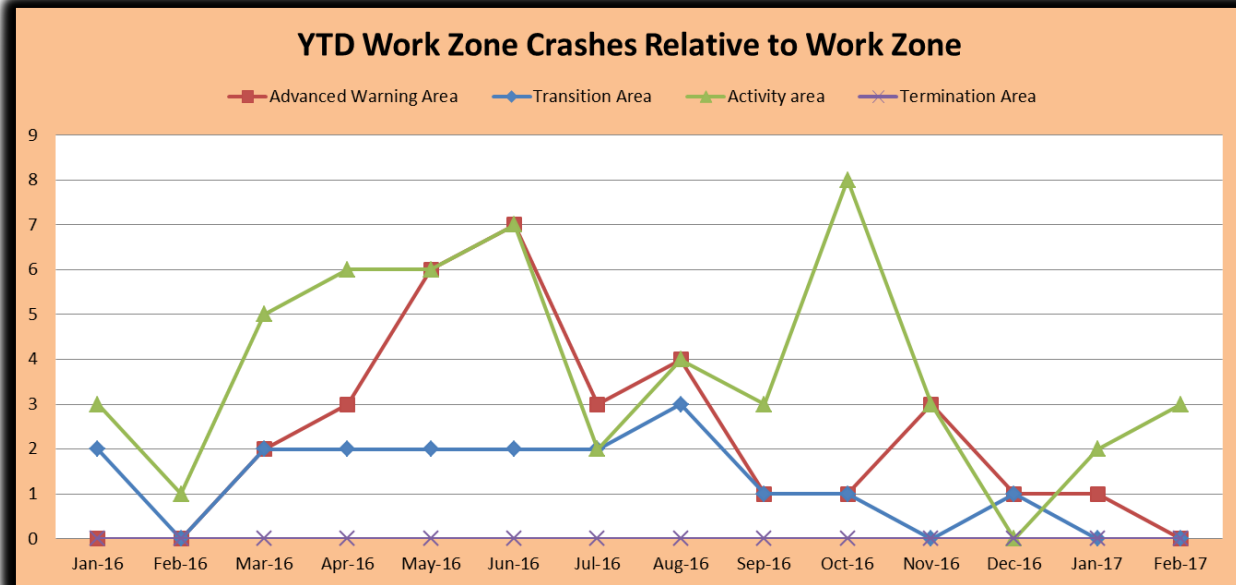
\*\*\*None\*\*\*

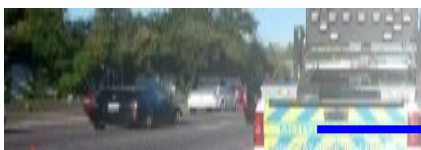
**Work Zone Related Crashes with Mobility Impact**

\*\*\*None\*\*\*



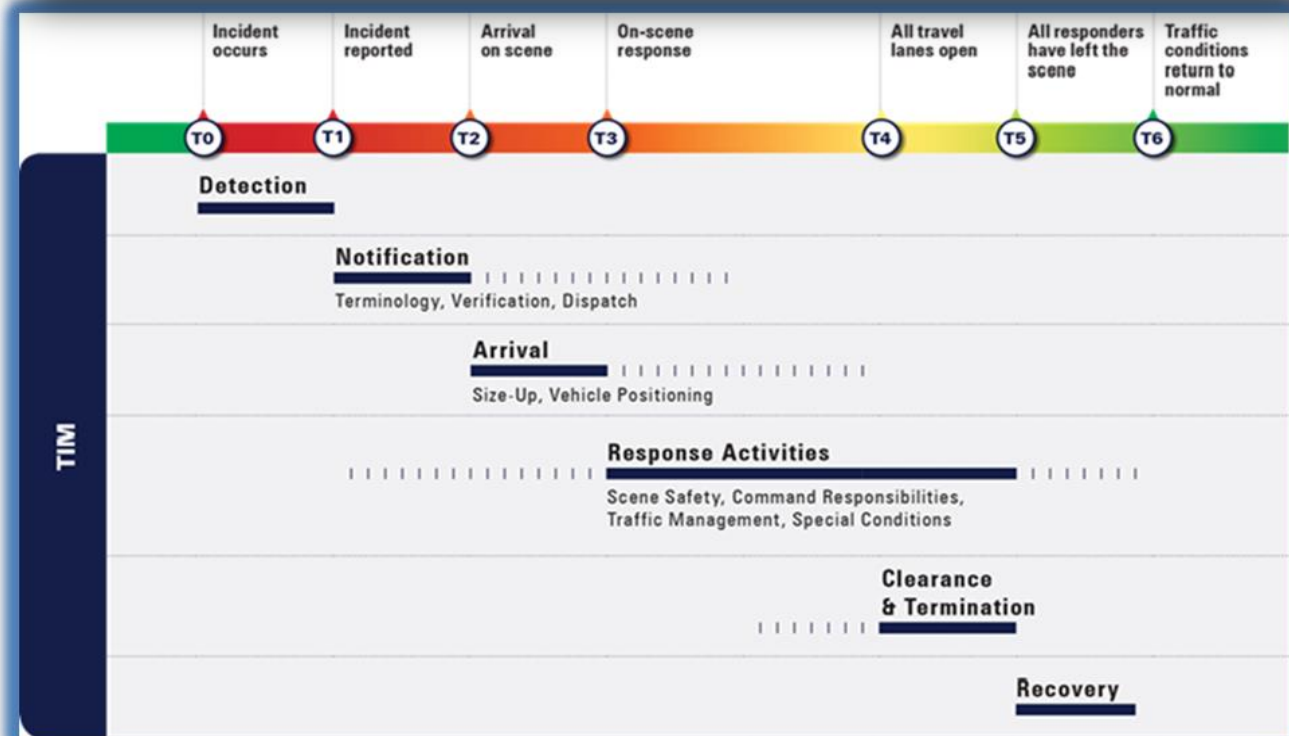
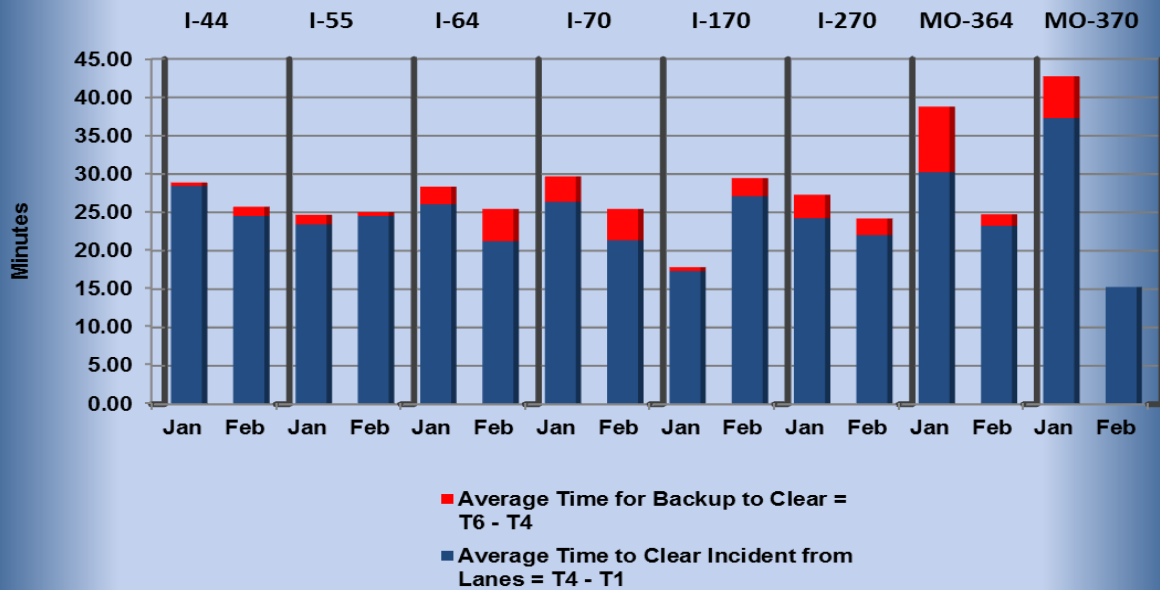
# WORK ZONES





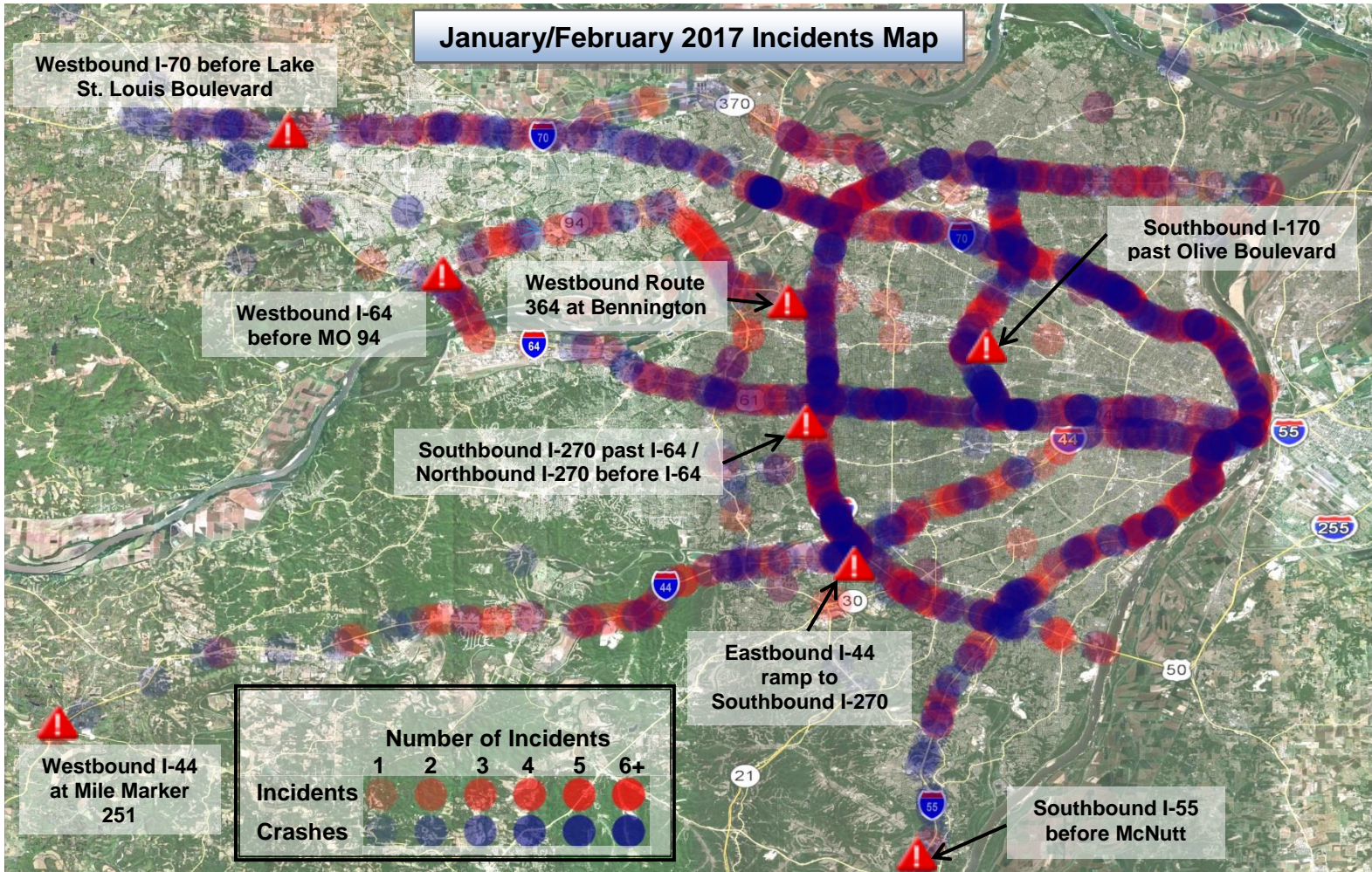
# INCIDENT MANAGEMENT

January 2017 vs. February 2017  
Incidents Summary



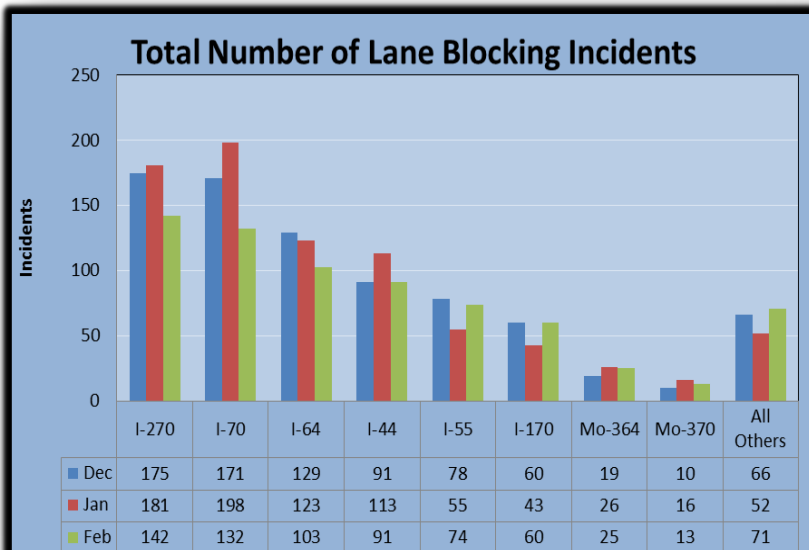


# INCIDENT MANAGEMENT



Denotes Location of Major Impact Traffic Incidents

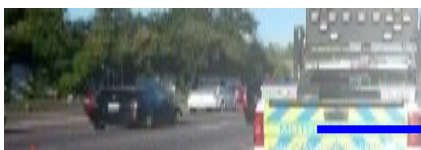
**Total Number of Incidents: December: 799 / January: 807 / February: 711**



**Major Impact Incidents**  
January 2017 vs. February 2017  
(4) (4)

**Fatal Incidents**  
January 2017 vs. February 2017  
(7) (7)

**Tractor Trailer Incidents**  
January 2017 vs. February 2017  
(45) (32)



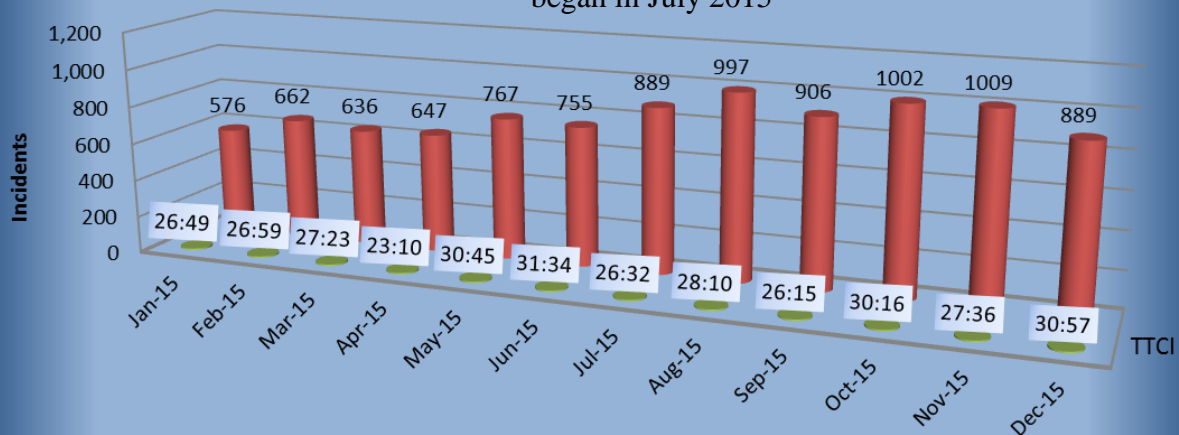
# INCIDENT MANAGEMENT

## Lane Blocking Incidents by Freeway January and February 2017

Interstate	Month	Number of Incidents	Average Time to Clear Incident from Lanes = T4 - T1	Average Time for Backup to Clear = T6 - T4	Freeway Miles	Incidents per Mile
I-44	Jan	113	28:45	00:44	33	3.42
I-44	Feb	91	24:52	01:23	33	2.76
I-55	Jan	55	23:46	01:24	23	2.39
I-55	Feb	74	24:54	00:49	23	3.22
I-64	Jan	123	26:06	02:31	40	3.08
I-64	Feb	103	21:24	04:23	40	2.58
I-70	Jan	198	26:38	03:31	38	5.21
I-70	Feb	132	21:37	04:07	38	3.47
I-170	Jan	43	17:36	00:50	11	3.91
I-170	Feb	60	27:12	02:36	11	5.45
I-270	Jan	181	24:23	03:07	36	5.03
I-270	Feb	142	22:05	02:17	36	3.94
MO-364	Jan	26	30:24	08:55	11	2.36
MO-364	Feb	25	23:26	01:48	11	2.27
MO-370	Jan	16	37:30	05:45	13	1.23
MO-370	Feb	13	15:28	00:00	13	1.00
Total	Jan/Feb	1395	24:45	02:46	410	3.40

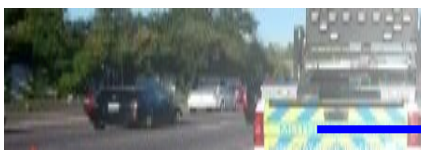
## 2015 Number of Incidents and Time to Clear Lanes

\*Note changes in Incident reporting data began in July 2015



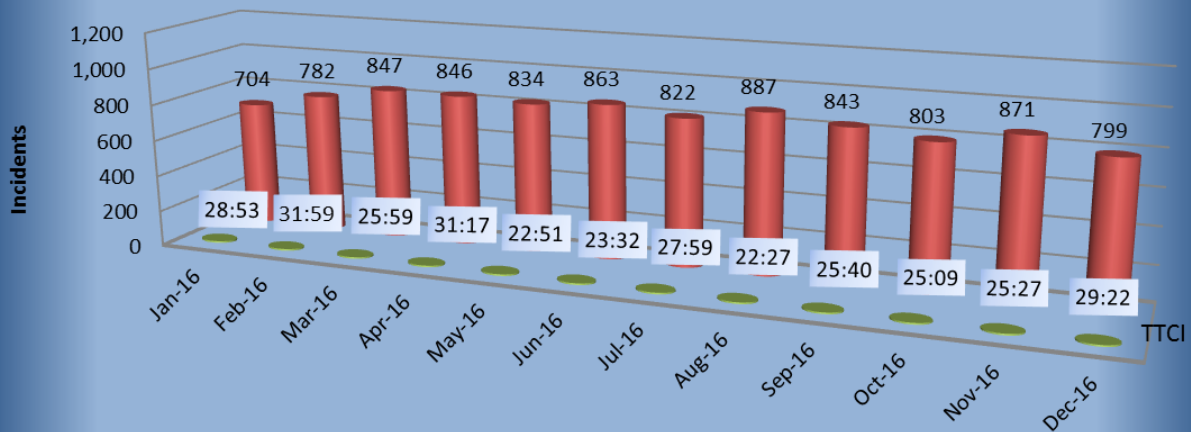
	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
TTCI	26:49	26:59	27:23	23:10	30:45	31:34	26:32	28:10	26:15	30:16	27:36	30:57
Incidents	576	662	636	647	767	755	889	997	906	1002	1009	889





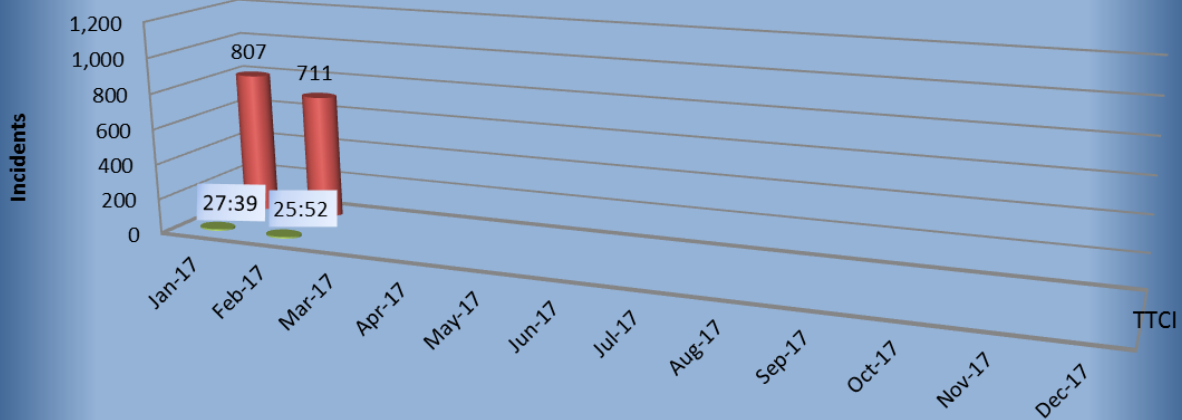
# INCIDENT MANAGEMENT

## 2016 Number of Incidents and Time to Clear Lanes



	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
TTCI	28:53	31:59	25:59	31:17	22:51	23:32	27:59	22:27	25:40	25:09	25:27	29:22
Incidents	704	782	847	846	834	863	822	887	843	803	871	799

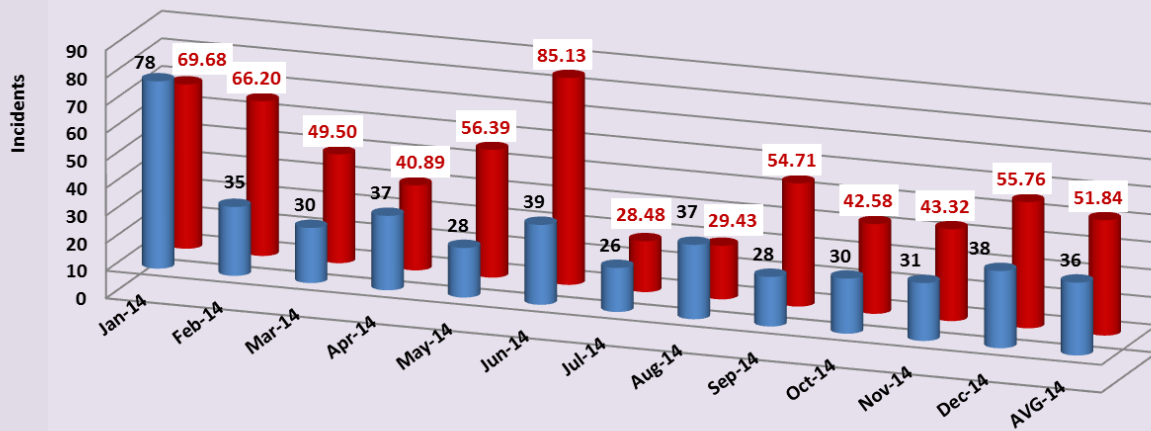
## 2017 Number of Incidents and Time to Clear Lanes



	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
TTCI	27:39	25:52										
Incidents	807	711										

# INCIDENT MANAGEMENT

2014 Tractor Trailer Incidents / Time to Clear



	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	AVG-14
Incidents	78	35	30	37	28	39	26	37	28	30	31	38	36
TTCI	69.68	66.20	49.50	40.89	56.39	85.13	28.48	29.43	54.71	42.58	43.32	55.76	51.84

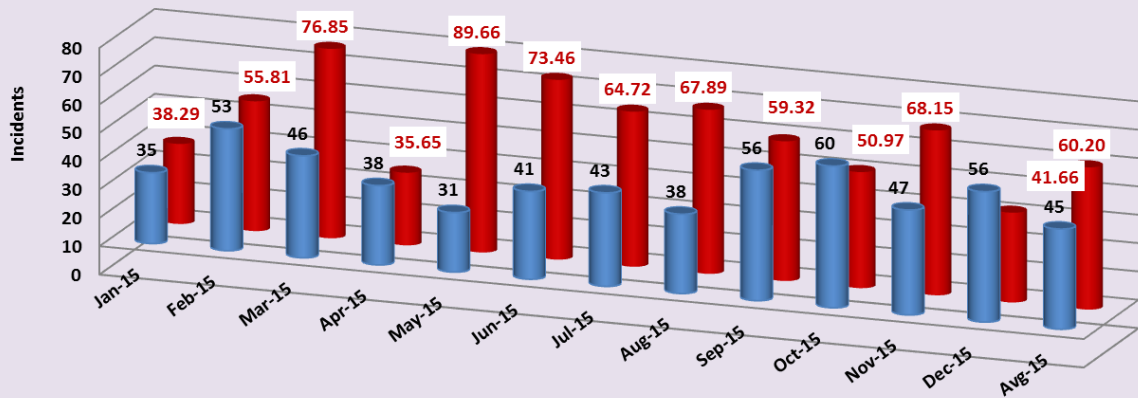


2014	I-44	I-55	I-64	I-70	I-170	I-255 / I-270	Route 364	Route 370	* Other	Total	TTCI
Jan	20	7	9	24	3	11	3	1	0	78	69.68
Feb	5	3	6	13	1	6	0	1	0	35	66.20
Mar	8	7	5	5	0	4	0	1	0	30	49.50
Apr	5	3	12	7	0	10	0	0	0	37	40.89
May	5	8	4	4	1	6	0	0	0	28	56.39
Jun	11	8	5	8	0	7	0	0	0	39	85.13
Jul	4	2	8	4	0	7	0	1	0	26	28.48
Aug	5	4	7	8	2	10	0	1	0	37	29.43
Sep	3	3	4	10	0	7	0	1	0	28	54.71
Oct	5	6	4	4	1	7	0	3	0	30	42.58
Nov	2	4	5	9	1	7	0	3	0	31	43.32
Dec	7	7	2	12	1	8	0	1	0	38	55.76
YR Totals	80	62	71	108	10	90	3	13	0	437	51.84

\*Other Routes are MoDOT maintained non-freeway routes and were not included on system until July 2015

# INCIDENT MANAGEMENT

2015 Tractor Trailer Incidents / Time to Clear



	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Avg-15
Incidents	35	53	46	38	31	41	43	38	56	60	47	56	45
TTCI	38.29	55.81	76.85	35.65	89.66	73.46	64.72	67.89	59.32	50.97	68.15	41.66	60.20



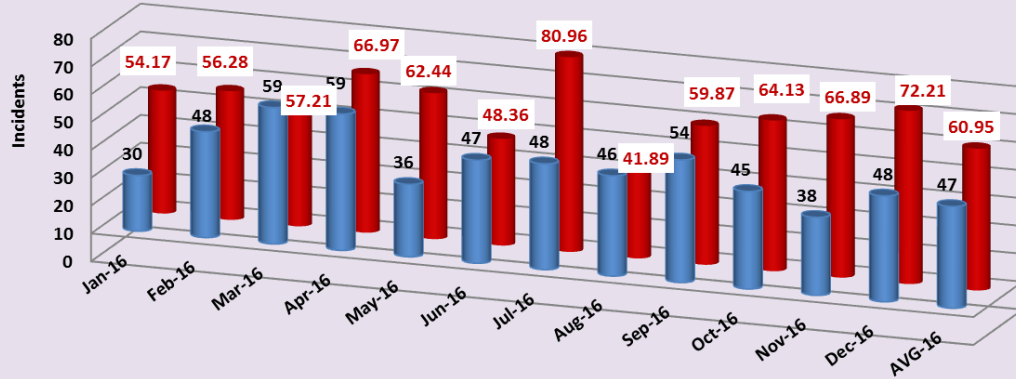
2015	I-44	I-55	I-64	I-70	I-170	I-255 / I-270	Route 364	Route 370	* Other	Total	
Jan	7	4	4	10	0	9	0	1	0	35	38.29
Feb	20	2	6	9	1	14	1	0	0	53	55.81
Mar	9	4	11	14	0	7	0	1	0	46	76.85
Apr	7	3	7	17	1	2	1	0	0	38	35.65
May	5	2	9	10	0	3	1	1	0	31	89.66
Jun	9	3	6	10	0	12	0	1	0	41	73.46
Jul	6	6	8	8	1	11	0	0	3	43	64.72
Aug	10	2	3	11	0	9	0	0	3	38	67.89
Sep	11	9	5	17	2	9	0	1	2	56	59.32
Oct	12	12	8	17	1	8	0	0	2	60	50.97
Nov	8	4	7	14	0	11	0	0	3	47	68.15
Dec	5	9	8	19	2	8	0	0	5	56	41.66
YR Totals	109	60	82	156	8	103	3	5	18	544	60.20

\*Other Routes are MoDOT maintained non-freeway routes and were not included on system until July 2015



# INCIDENT MANAGEMENT

2016 Tractor Trailer Incidents / Time to Clear



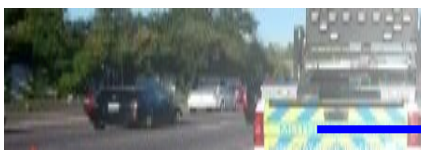
	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	AVG-16
Incidents	30	48	59	59	36	47	48	46	54	45	38	48	47
TTCI	54.17	56.28	57.21	66.97	62.44	48.36	80.96	41.89	59.87	64.13	66.89	72.21	60.95



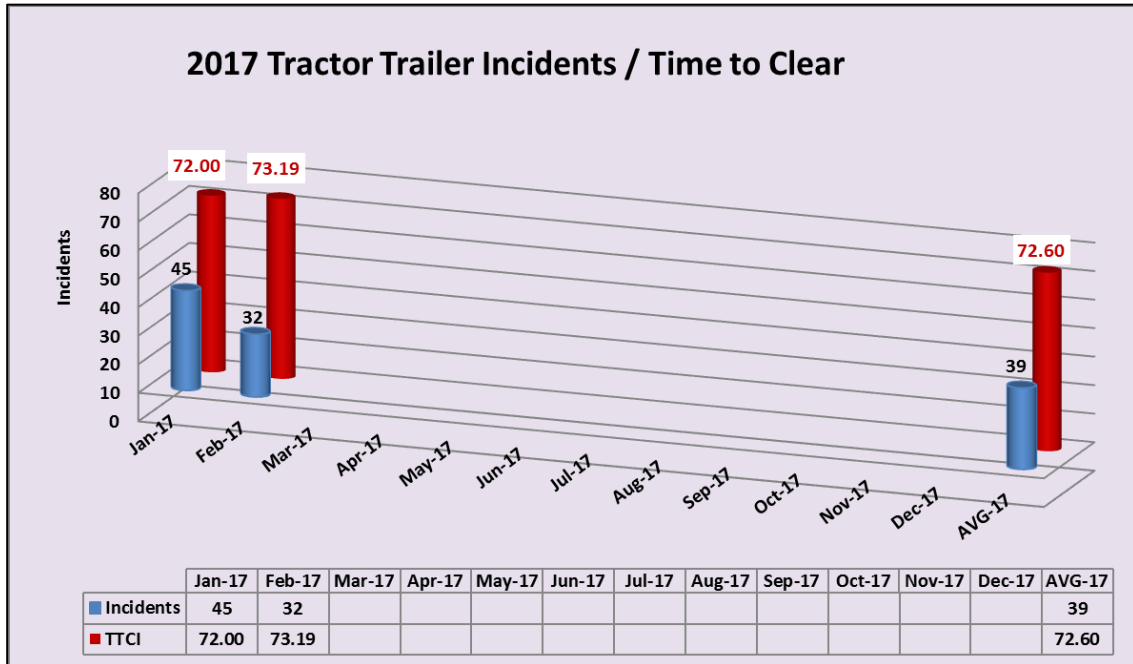
2016	I-44	I-55	I-64	I-70	I-170	I-255 / I-270	Route 364	Route 370	* Other	Total
Jan	7	3	4	5	1	10	0	0	0	30
Feb	10	3	10	15	2	5	0	1	2	48
Mar	14	6	6	22	2	8	0	0	1	59
Apr	14	7	6	16	1	11	0	2	2	59
May	7	4	5	9	0	7	0	2	2	36
Jun	14	3	8	12	0	7	0	1	2	47
Jul	16	3	5	13	0	6	0	2	3	48
Aug	16	3	4	9	2	11	0	0	1	46
Sep	12	3	5	18	1	13	0	0	2	54
Oct	10	4	5	11	0	10	0	3	2	45
Nov	18	6	1	6	0	4	0	2	1	38
Dec	5	7	7	14	1	11	0	1	2	48
YR Totals	143	52	66	150	10	103	0	14	20	558

\*Other Routes are MoDOT maintained non-freeway routes and were not included on system until July 2015





# INCIDENT MANAGEMENT



2017	I-44	I-55	I-64	I-70	I-170	I-255 / I-270	Route 364	Route 370	* Other	Total
Jan	11	4	4	11	0	15	0	0	0	45
Feb	10	2	4	6	1	9	0	0	0	32
Mar										0
Apr										0
May										0
Jun										0
Jul										0
Aug										0
Sep										0
Oct										0
Nov										0
Dec										0
YR Totals	21	6	8	17	1	24	0	0	0	77

\*Other Routes are MoDOT maintained non-freeway routes and were not included on system until July 2015










# INCIDENT MANAGEMENT

## Major Impact Traffic Incidents and Mitigation

**1/15/2017 (Sunday)**

- **Time:** 12:32 pm to 8:16 pm
- **Location:** St. Louis County – Eastbound I-44 ramp to Southbound I-270
- **Event Type:** Single-Vehicle Tractor Trailer Crash
- **Estimated Initial Impact:** Non-Rush Hour: 3 of 3 ramp lanes affected equals (=) 100%
- **Incident Details:** A tractor trailer traveling eastbound on the I-44 ramp to Southbound I-270 crashed and blocked the ramp. While attempting to move the tractor trailer, the trailer snapped in half. The trailer was hauling automotive brake parts and took some time to unload. Ten gallons of diesel fuel leaked from the truck. There was not a queue for this incident as traffic was forced to divert.
- **Action Taken:** EOC and Motor Carriers were contacted along with an incident alert email sent out to I44IM and SLADMINTEXT. DMS boards were utilized advising of the ramp closure. Police, Tow, Fire, EMS, and Emergency Response all responded. Environmental Services were called and on scene by 2:31 pm for the diesel spill. Heavy tow arrived on scene 3:10 pm. Crews were finished unloading the truck by 3:49 pm and the trailer was removed at 7:59 pm. Environmental crew inspected the road surface at 8:10 pm.
- **Event Duration:** 7 hours 43 minutes

Eastbound I-44 To Southbound I-270	Right Exit Lane	Lane 1	Left Exit Lane
			
Closed Hours/Minutes	7:43	7:42	7:43





# INCIDENT MANAGEMENT

## Major Impact Traffic Incidents and Mitigation

44 AT 270 HM



270 AT 44 SWQ



## Major Impact Traffic Incidents and Mitigation

1/17/2017 Tuesday

- **Time:** 8:28 am to 5:27 pm \*\*\*Fatality\*\*\*
- **Location:** St. Louis County – Southbound I-270 past I-64 / Northbound I-270 before I-64
- **Event Type:** Four-Vehicle Crash
- **Estimated Initial Impact:** Rush Hour: 5 of 5 Travel Lanes affected equals (=) 100%
- **Incident Details:** A four vehicle crash involving a car, van, tow truck and tractor trailer full of frozen food on fire.
- **Action Taken** Missouri State Highway Patrol, Police, EMS, Fire, Tow, MoDOT Maintenance, medical examiner, Health Department and Emergency Response Operators all responded. Initially, southbound lanes 1 thru 4 were closed and traffic was moving around the incident using lane number 5. Northbound lanes 1 thru 4 were closed by fire. ER and PD also shut down the Eastbound I-64 ramp to Southbound I-270 and Westbound I-64 ramp to Southbound I-270. A floodgate was activated and DMS Boards were pushed throughout the District advising of the closure. EOC, Community Relations, Motors Carrier, Maintenance Superintendents, Area Engineer, and IDOT were all notified. An I-270 Incident Alert and updates were sent every hour throughout the duration of the incident to SLAdminText, Gateway Guide and SLCR. At 8:50 am, traffic engineers began to make signal adjustments. Immediate signal timing change efforts included: adjusting the Northbound I-270 off-ramp to Route 100 for the remainder of the AM Peak, manually changing Route 100 from Barrett Station to Baxter to run the PM Peak plan, and manually changing Route 141 from Manchester Highlands to Milldale to run the AM Peak plan. As closures for the I-44 to I-270 ramps were being planned, the AM plan was further extended for Route 141 south to Meramec Station/Valley to encompass the I-44 interchange area. Also, a 180 second U-turn plan was downloaded to the Lindbergh interchange, but was not implemented.

The traffic engineer was then alerted around 10:00 am that Southbound I-270 was mistakenly being closed at Ladue and began to work on implementing changes to the I-270/Ladue interchange system. The download did not immediately take to the controller, so the Southbound I-270 off-ramp intersection was placed into free operation. The crews who mistakenly closed Southbound I-270 at Ladue were finally contacted and moved the closure south to I-64 at 10:45 am.

Around 11:00 am Northbound I-270 began to queue approaching Ladue with traffic seeking to turn around to access Southbound I-270. The interchange was then placed into AM plan and the northbound queue improved.


After I-270 was reopened south to I-64, traffic began following Westbound I-64 to Southbound Route 141. Operations of Route 141 were reviewed and it was decided to change the I-64 interchange with Route 141 to run the PM Plan. Making that change cleared queuing along the Westbound I-64 to Southbound Route 141 ramp. Timing changes were reversed at 2:00 pm with the exception of the I-64/Route 141 interchange. This plan normally starts at 4:00 pm so it ran until 4:00 pm and then was transferred back to normal operation. Timing changes were reversed at 5:00 pm for the I-64/Route 141 interchange. Both signals were adjusted to run Pattern 30 in manual mode and were transferred back to normal operation. The traffic queue was observed from being 2 miles at 12:39 pm and up to 5.6 miles at 4:44 pm. Maintenance cleared debris while fire washed down the roadway. Lanes were progressively opened throughout the event in both directions. Delay for opening of southbound lanes 4 and 5 were caused by a heavy tow needing assistance to lift up the trailer onto the tow bed. Northbound closures totaled 5 hours and 11 minutes.




# INCIDENT MANAGEMENT

## Major Impact Traffic Incidents and Mitigation

- **Event Duration:** 8 hours 58 minutes

Southbound I-270 past I-64 	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Right Shoulder
Closed Hours/Minutes	6:25	6:25	6:23	8:02	7:32	7:32

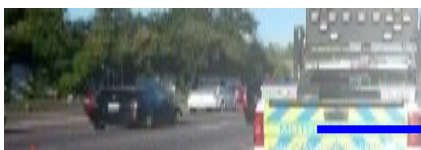
Northbound I-270 before I-64 	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Right Shoulder
Closed Hours/Minutes	4:50	4:50	2:14	2:14	0:11	0:11





## Major Impact Traffic Incidents and Mitigation





# INCIDENT MANAGEMENT

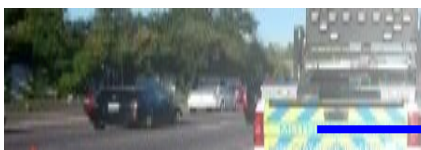
## Major Impact Traffic Incidents and Mitigation

1/23/2017 (Monday)

- **Time:** 8:59 pm – 12:38 am \*\*\* Fatality \*\*\*
- **Location:** Jefferson County – Southbound I-55 before McNutt
- **Event:** Single-Vehicle Crash
- **Estimated Initial Impact:** Non-Rush Hour: 2 of 2 travel lanes affected equals (=) 100%
- **Incident Details:** TMC notified of crash over the police scanner. Once observed on CCTV, the TMC could see that the Southbound I-55 was completely shut down at mile marker 179 (before McNutt) with Pevely PD and Troop C on scene. A vehicle with two individuals traveled off the right side of the road, down a small embankment and flipped on its roof blocking the left lane.
- **Action:** MoDOT Emergency Responders arrived to shut down lanes and diverted traffic onto Route Z. Motorists could detour onto Hwy A or Jeff Co Blvd 61/67 and get back to the interstate. Notifications were made to EOC, Motor Carriers, Communications Staff, Area Engineer, Incident Manager, and ER Supervisor. A Floodgate was activated with DMS Boards advising motorists of the crash and the detour to Route Z. An I-55 Incident Alert was also sent out to I-55 along with an alert to SLAdmin. The queue was 2 miles when all lanes reopened.
- **Event Duration:** 3 hours 39 minutes

Southbound I-55 before McNutt	Left Shoulder	Lane 1	Lane 2	Right Shoulder
				
Closed Hours/Minutes	3:39	3:39	3:39	3:39






# INCIDENT MANAGEMENT

## Major Impact Traffic Incidents and Mitigation

1/31/2017 (Tuesday)

- **Time:** 6:09 pm to 10:01 pm \*\*\*Fatality\*\*\*
- **Location:** St. Charles County – Westbound I-70 before Lake St. Louis Boulevard
- **Event Type:** Pedestrian Struck
- **Estimated Initial Impact:** Rush Hour: 3 of 3 travel lanes affected (=) 100%
- **Incident Details:** A pedestrian was struck by a vehicle in Lane 1. The impact caused the pedestrian to be thrown into Lane 2 where two additional vehicles struck the pedestrian. The TMC dispatched MoDOT Emergency Response to the scene.
- **Action Taken:** Lake St. Louis Police Department blocked all lanes. Missouri State Highway Patrol and O'Fallon Police Department arrived on scene to divert traffic onto Bryan Road. Traffic was diverted onto Bryan Road and could then take North Outer I-70 or South Outer I-70 as a detour. An engineer was notified and began to adjust signal timing for traffic. The EOC, Area Engineer, Communication Staff, Motor Carriers, and the MoDOT Incident Management Coordinator were all notified. The TMC messaged for the event and the event was entered into TMS to notify the public of the closure. An incident alert update and cleared emails were used to advise management of the closure status. Traffic queued approximately five miles, but returned to normal almost immediately after all lanes were opened.
- **Event Duration:** 4 hours 7 minutes

Westbound I-70 Before Lake St. Louis Blvd.	Left Shoulder	Lane 1	Lane 2	Lane 3	Right Shoulder
					
Closed Hours/Minutes	3:28	3:33	3:52	3:52	4:07








# INCIDENT MANAGEMENT

## Major Impact Traffic Incidents and Mitigation

2/3/2017 (Friday)

- **Time:** 2:59 pm to 8:58 pm
- **Location:** St. Charles County – Westbound I-64 before MO 94
- **Event Type:** Overturned Tractor Trailer
- **Estimated Initial Impact:** Rush Hour: 3 of 4 travel lanes affected equals (=) 75%
- **Incident Details:** A tractor trailer carrying paper products fell onto its side in the right lane of Westbound I-64 just east of MO 94.
- **Action Taken:** Missouri State Highway Patrol arrived on scene and notified the TMC that a CCTV pole base for CCTB #184 was damaged from the impact of the tractor trailer. Fire Department, MoDOT Emergency Responders and Tow responded. There was also damage to the CCTV box so a signal electrician was dispatched to the location to secure the box with a strap. The driver had a suspended license and was detained. A second tractor trailer was dispatched to load cargo from the crashed vehicle. Lanes were progressively opened to move traffic. Traffic queued back 3.5 miles for 2 hours and 49 minutes during the event.
- **Event Duration:** 5 hours 59 Minutes

Westbound I-64 before MO 94	Left Shoulder	Lane 1	Lane 2	Lane 3	Lane 4	Right Shoulder
						
Closed Hours/Minutes	0:00	0:02	1:11	2:07	5:59	5:59






# INCIDENT MANAGEMENT

## Major Impact Traffic Incidents and Mitigation

2/3/2017 (Friday)

- **Time:** 11:16 am to 1:31 pm
- **Location:** St. Louis County – Westbound Route 364 at Bennington Place
- **Event Type:** Vehicle Fire
- **Estimated Initial Impact:** Non Rush Hour: 4 of 5 travel lanes affected equals (=) 80%
- **Incident Details:** A trash truck caught fire with a full load of trash inside. While the fire department tried to extinguish the fire, the trash load was emptied onto the two right lanes and right shoulder of the roadway.
- **Action Taken:** MoDOT Emergency Responders assisted Maryland Heights Police Department with traffic Control. For the duration of the incident the Northbound and Southbound I-270 ramps to Westbound 364 were closed by Maryland Heights Police Department. DMS boards were activated during this event. A traffic engineer was advised to adjust traffic signals at Bennington Place to help with congestion. The traffic queue reached  $\frac{3}{4}$  of a mile at its peak. The trash company loader arrived shortly after the fire to help with the cleanup, but the loader malfunctioned. MoDOT Normandy Maintenance was contacted to help expedite clean up with their loader. A SLAdmin Text was sent and MoDOT Communications was notified.
- **Event Duration:** 2 hours 14 minutes


Westbound Route 364 at Bennington Place	Left Shoulder	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Right Shoulder
 Route 364							
Closed Hours/Minutes	0:48	0:48	1:30	2:10	2:14	2:14	2:14



## Major Impact Traffic Incidents and Mitigation

2/4/2017 (Saturday)

- **Time:** 9:39 am to 11:58 am
- **Location:** Franklin County – Westbound I-44 at Mile Marker 251
- **Event Type:** Two-Vehicle Crash
- **Estimated Initial Impact:** Non-Rush Hour: 1 of 3 travel lanes affected equals (=) 33%
- **Incident Details:** A crash involving a tractor trailer and a sport utility vehicle. The vehicle ran into the back of the tractor trailer. Due to the severity of the accident, it resulted in one person being extricated. Missouri Highway Patrol completed a reconstruction of the event. The exit lane was partly closed during the duration of the event.
- **Action Taken:** Three DMS boards were activated during this event. An I-44 Incident Alert was sent. The traffic queue reached 1.5 miles at its height. No Emergency Response Units were available to respond.
- **Event Duration:** 2 hours 14 minutes

Westbound I-44 at Mile Marker 251 	Lane 1	RX 1	Right Shoulder
Closed Hours/Minutes	0:41	2:11	2:14






## Major Impact Traffic Incidents and Mitigation

2/7/2017 (Tuesday)

- **Time:** 2:41 pm to 5:00 pm
- **Location:** St. Louis County – Southbound I-170 past Olive Boulevard
- **Event Type:** Three-Vehicle Crash
- **Estimated Initial Impact:** Rush Hour: 4 of 4 traffic lanes affected equals (=) 100%
- **Incident Details:** Two cars collided into a boom truck causing the boom truck to turn over on its side. The boom truck was carrying light bulbs that spilled onto the roadway.
- **Action Taken:** Emergency Response was dispatched to the scene. Olivette Police Department, Fire, and EMS blocked all lanes. Emergency Response and Olivette Police Department began diverting traffic onto Olive Boulevard. Traffic was able to take either Lindbergh or County Roads back to I-170. A MoDOT traffic engineer began to adjust necessary signal timing for traffic. Lane 4 opened up at 3:31 pm for a total closure of 50 minutes. However, lane 4 closed two additional times while waiting on a tow vehicle to flip the boom truck over and MoDOT maintenance to arrive on scene to sweep up glass. The EOC, Area Engineer, Communication Staff, Motor Carriers and the MoDOT Incident Management Coordinator were all notified. The TMC messaged for the event and entered it into TMS to notify the public of the closure. Traffic queued approximately 3 ½ miles, but returned to normal 20 minutes after all lanes were opened.
- **Event Duration:** 2 hours 19 minutes

Southbound I-170 past Olive Boulevard	Left Shoulder	Lane 1	Lane 2	Lane 3	Lane 4	Right Shoulder
						
Closed Hours/Minutes	2:19	2:19	2:19	2:19	1:26	1:26



# FREEWAY MANAGEMENT

## AM PEAK PERIOD MOBILITY JANUARY 2017

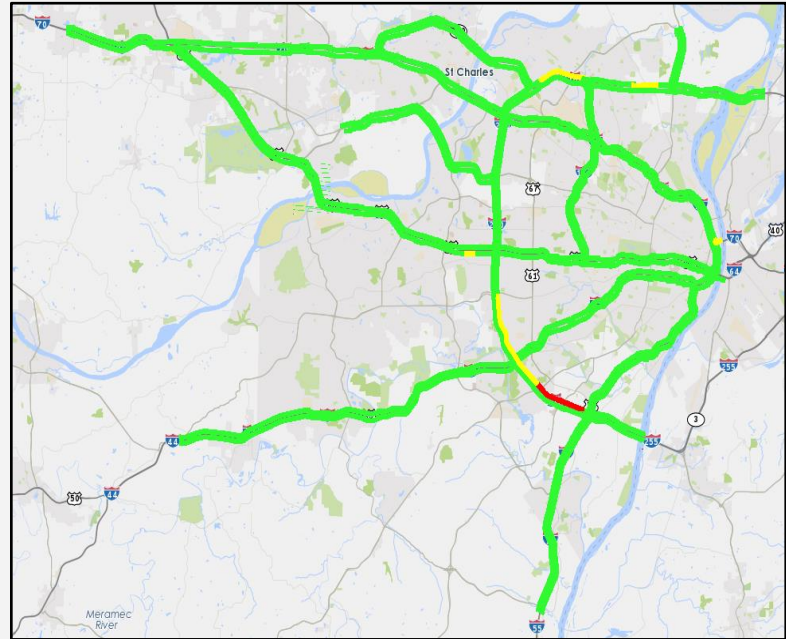
6 am – 7 am

### LEGEND (Speed Index)

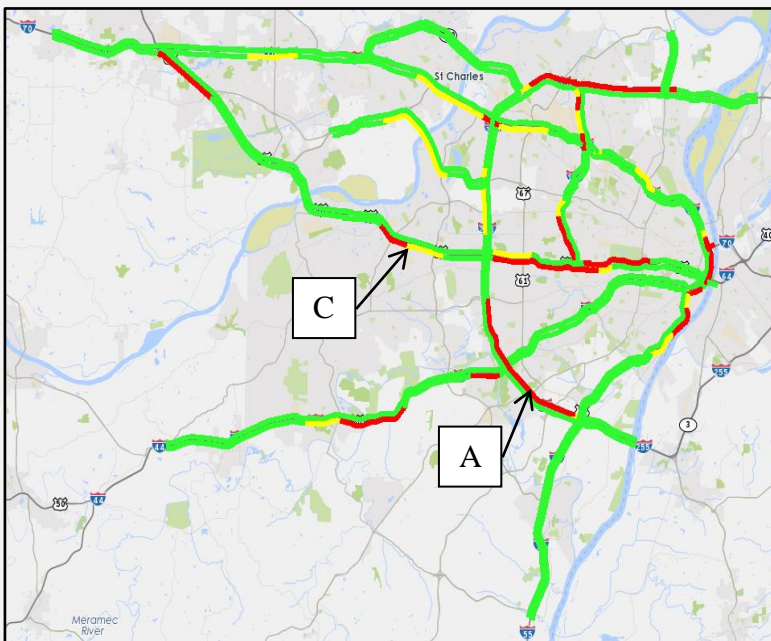
- High Mobility (.90+)
- Medium Mobility (.80-.90)
- Low Mobility (< .80)

### Highlighted Heat Map Locations

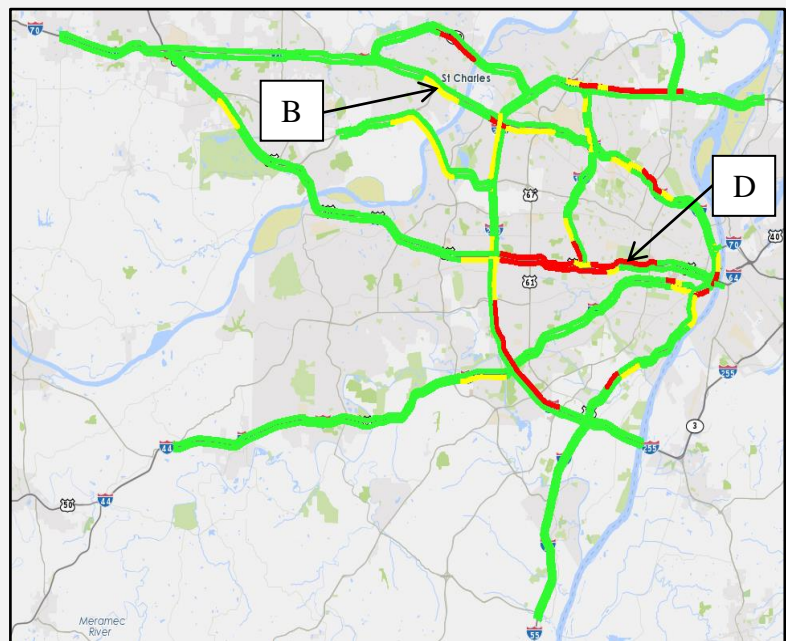
- A. NB I-270 from I-55 to I-64
- B. EB I-70 from MO 94/First Capitol to I-170
- C. EB I-64 from Long Road to MO 141
- D. WB I-64 from Kingshighway to I-270



7 am – 8 am



8 am – 9 am





# FREEWAY MANAGEMENT

## AM PEAK PERIOD MOBILITY FEBRUARY 2017

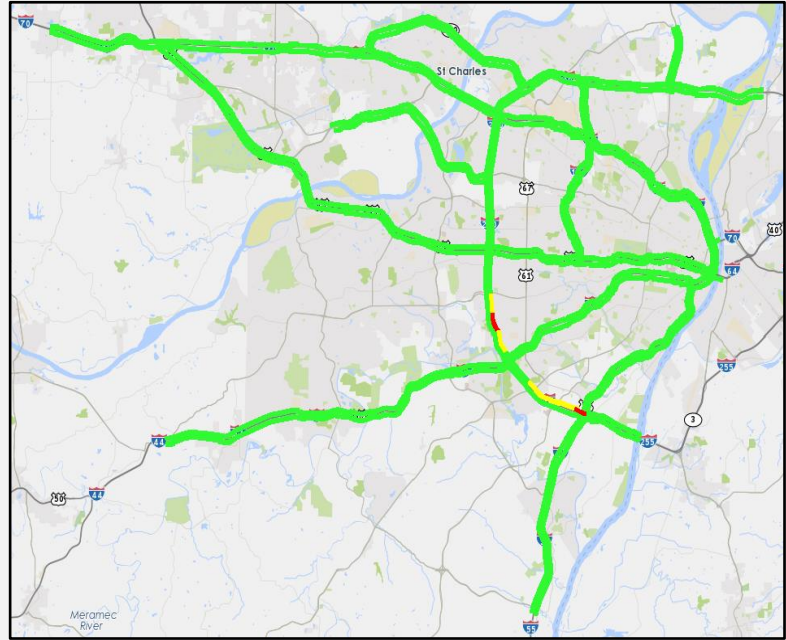
6 am – 7 am

### LEGEND (Speed Index)

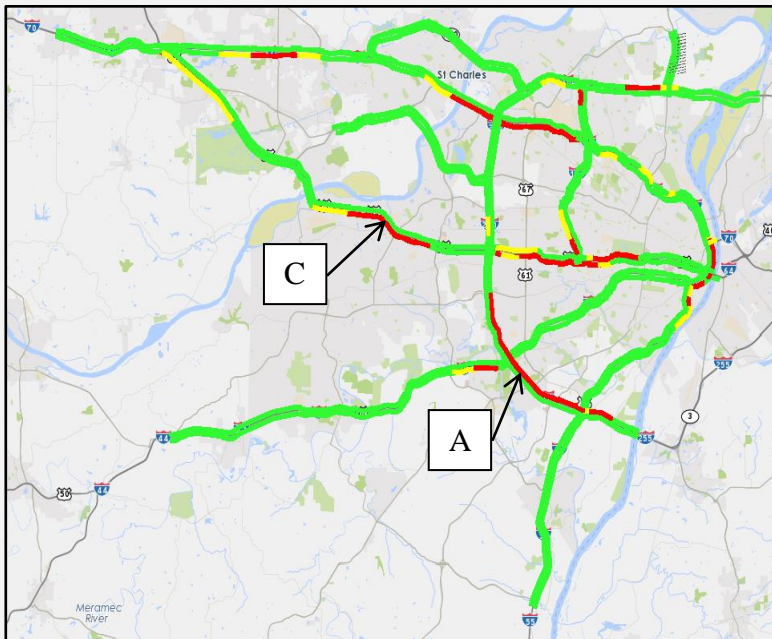
- High Mobility (.90+)
- Medium Mobility (.80-.90)
- Low Mobility (< .80)

### Highlighted Heat Map Locations

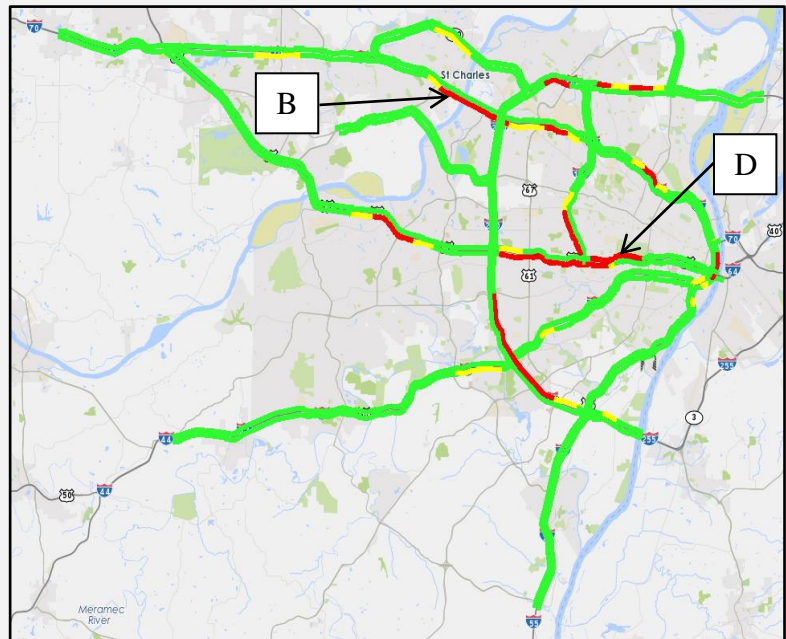
- A. NB I-270 from I-55 to I-64
- B. EB I-70 from MO 94/First Capitol to I-170
- C. EB I-64 from Long Road to MO 141
- D. WB I-64 from Kingshighway to I-270



7 am – 8 am



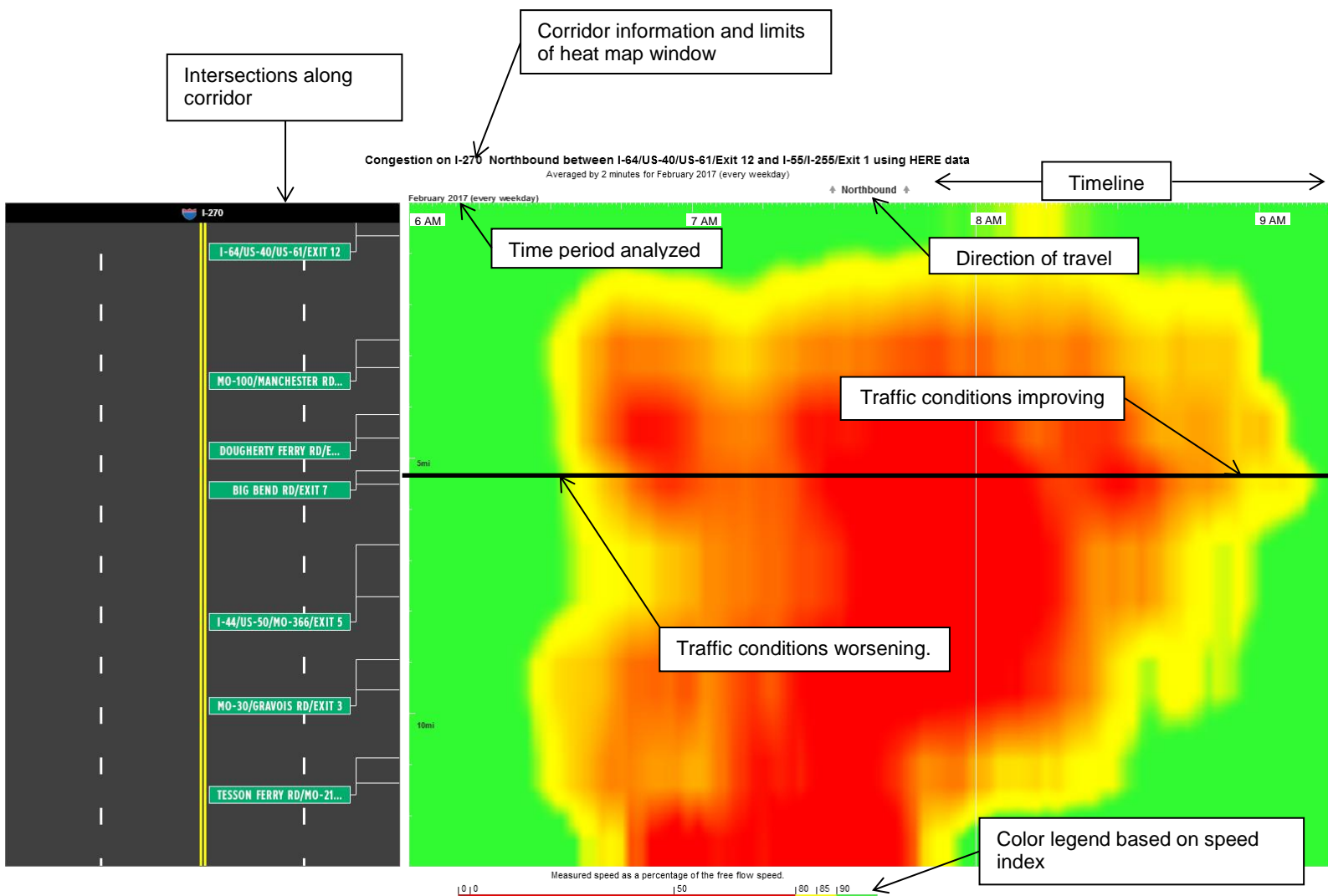
8 am – 9 am



# FREEWAY MANAGEMENT

## Congestion Scan Heat Maps

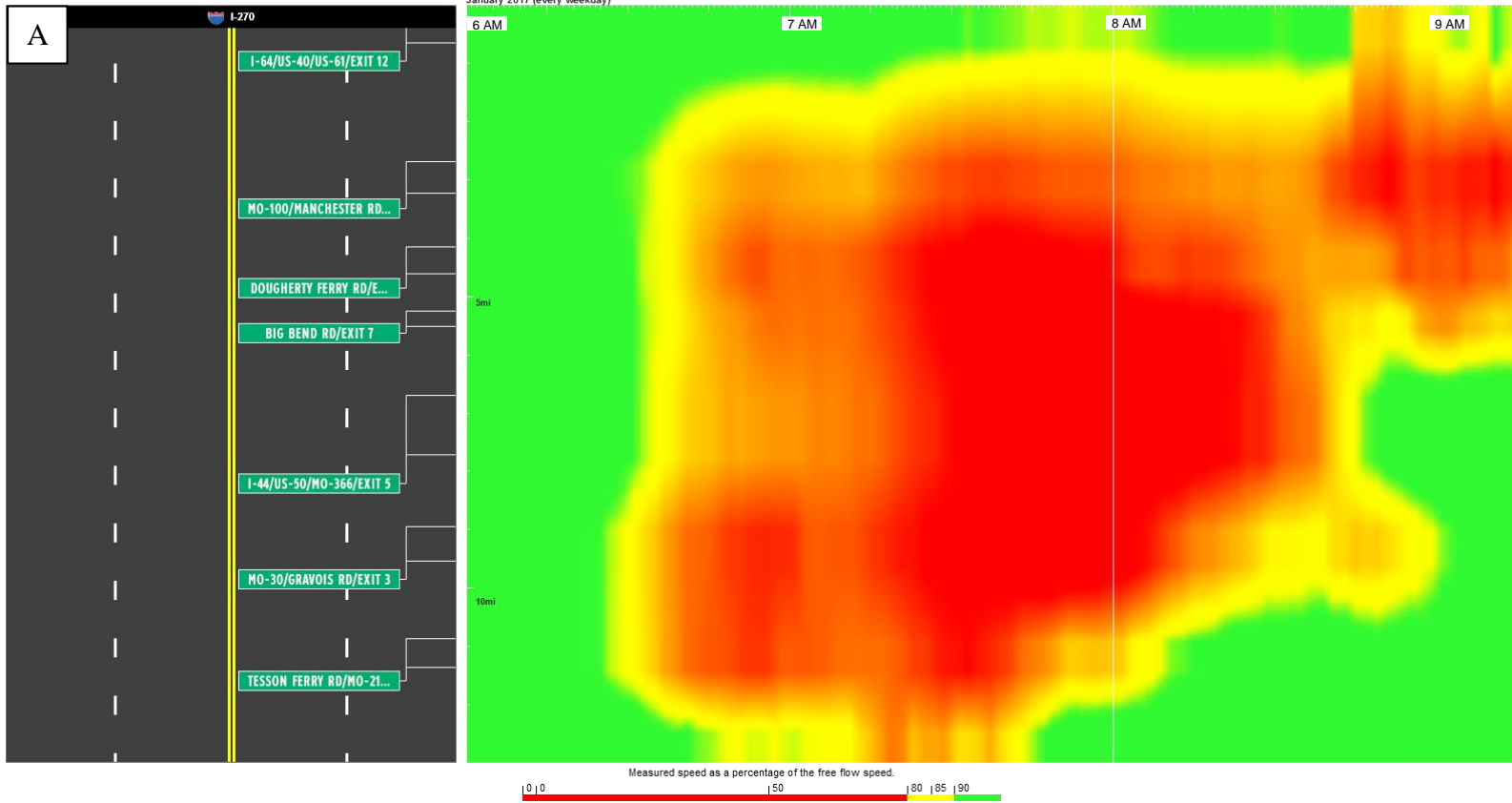
- The heat maps depict congestion along a corridor over a set time period.
- The map below shows Northbound I-270 from I-55 to I-64 during the hours of 6am – 9am for the month of February 2017.
- Following a horizontal line across the heat map at a given intersection will show traffic conditions at that location over time. Using the intersection of Big Bend Road as an example the heat map depicts conditions worsening around 6:30am, starting to improve around 8:45am and near free flow speeds by 9:15am.
- Alternatively, tracing the heat map vertically depicts traffic conditions along the corridor at that moment in time.



# FREEWAY MANAGEMENT

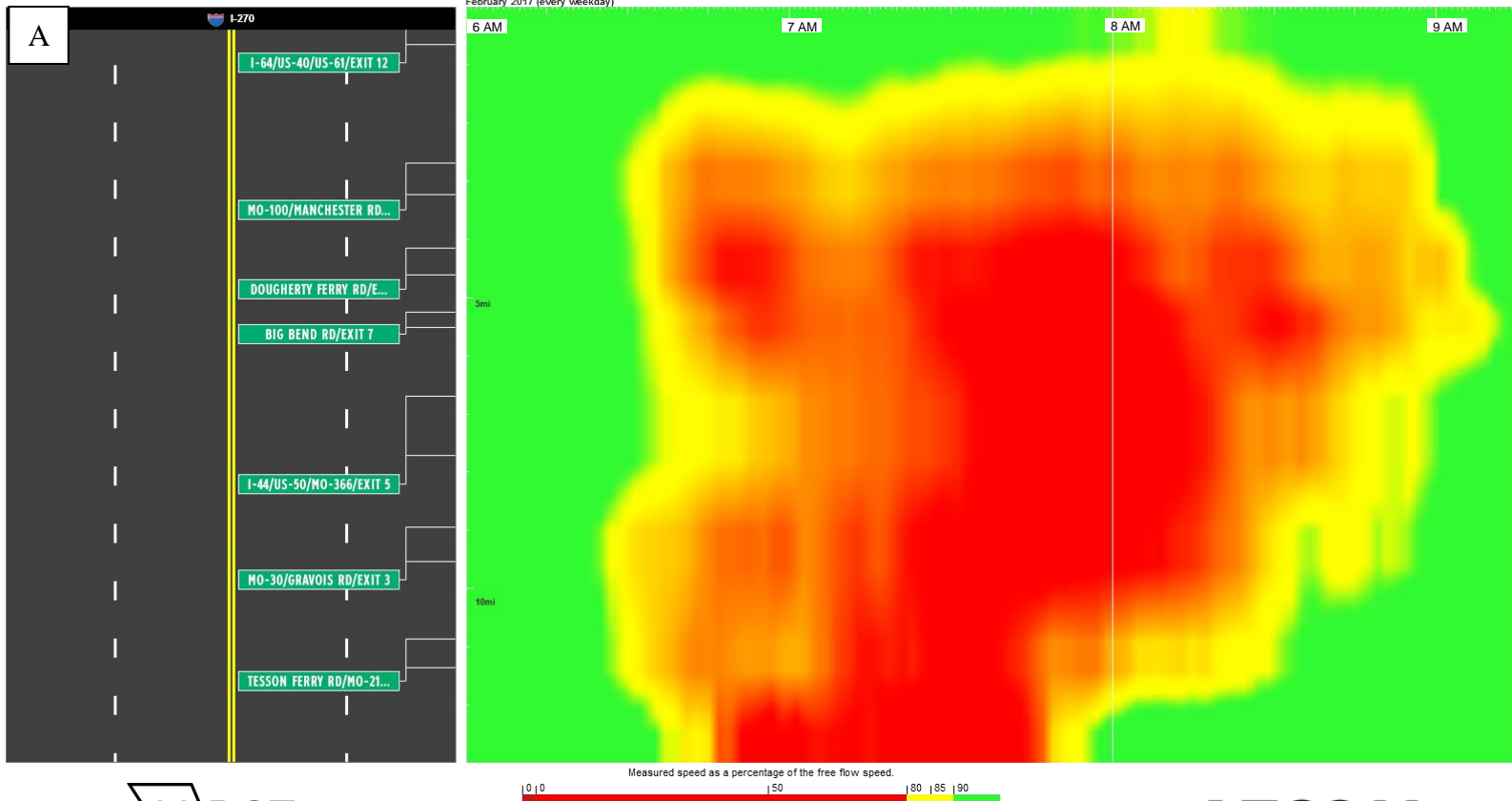
Congestion on I-270 Northbound between I-64/US-40/US-61/Exit 12 and I-55/I-255/Exit 1 using HERE data  
Averaged by 2 minutes for January 2017 (every weekday)

Northbound



Congestion on I-270 Northbound between I-64/US-40/US-61/Exit 12 and I-55/I-255/Exit 1 using HERE data  
Averaged by 2 minutes for February 2017 (every weekday)

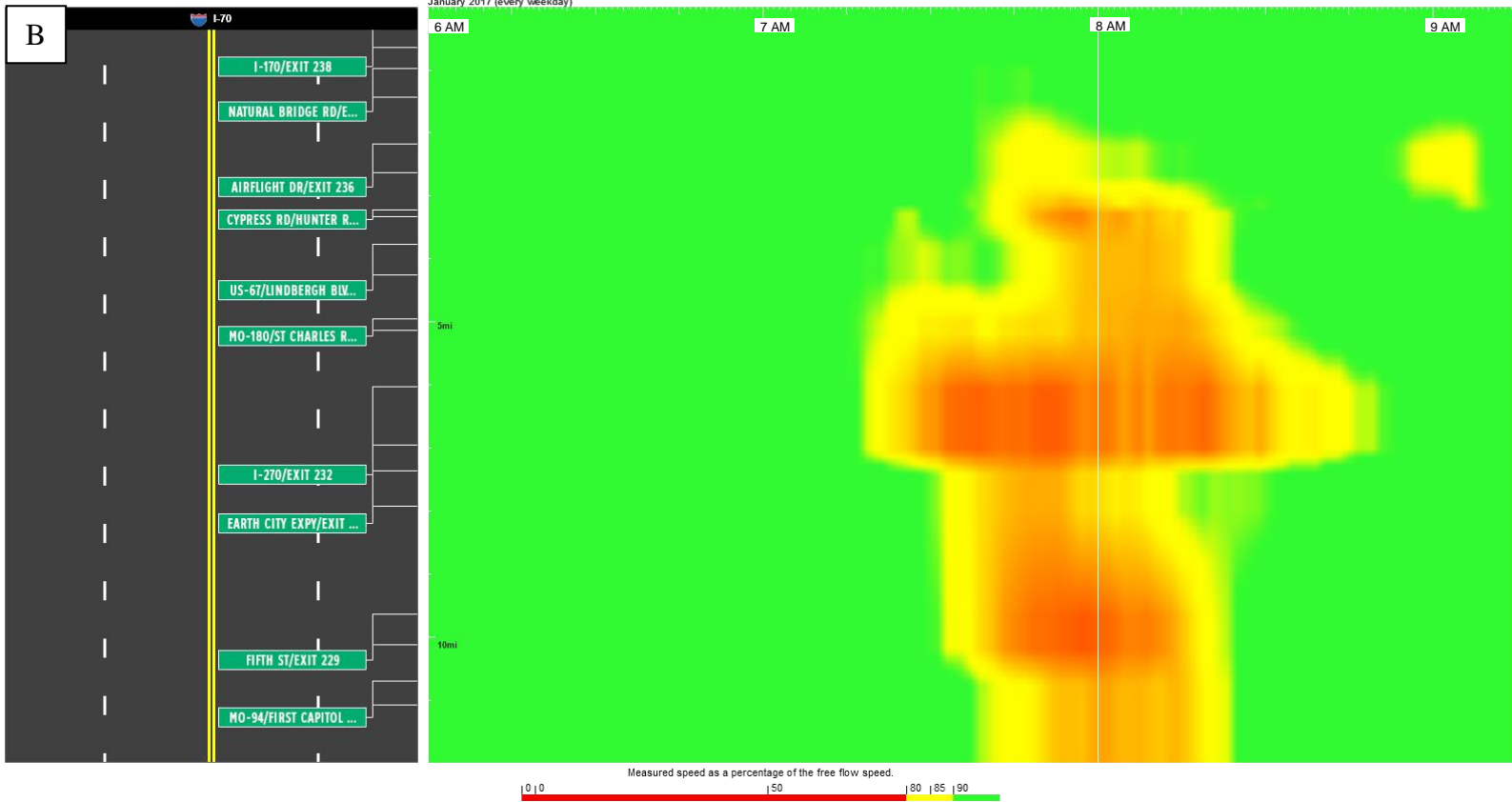
Northbound



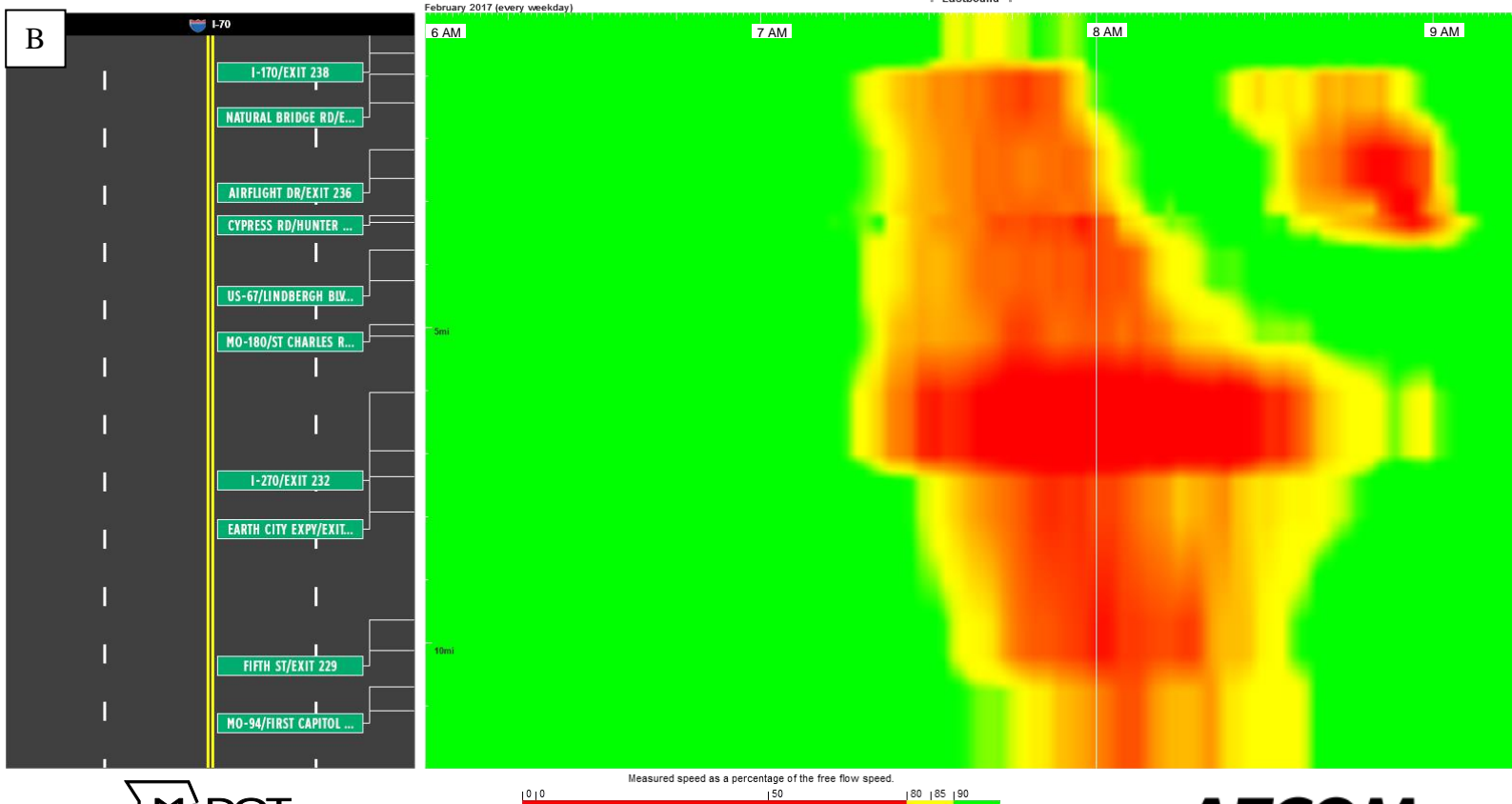


# FREEWAY MANAGEMENT

Congestion on I-70 Eastbound between MO-94/First Capitol Dr/Exit 228 and I-170/Exit 238 using HERE data  
Averaged by 2 minutes for January 2017 (every weekday)



Congestion on I-70 Eastbound between MO-94/First Capitol Dr/Exit 228 and I-170/Exit 238 using HERE data  
Averaged by 2 minutes for February 2017 (every weekday)

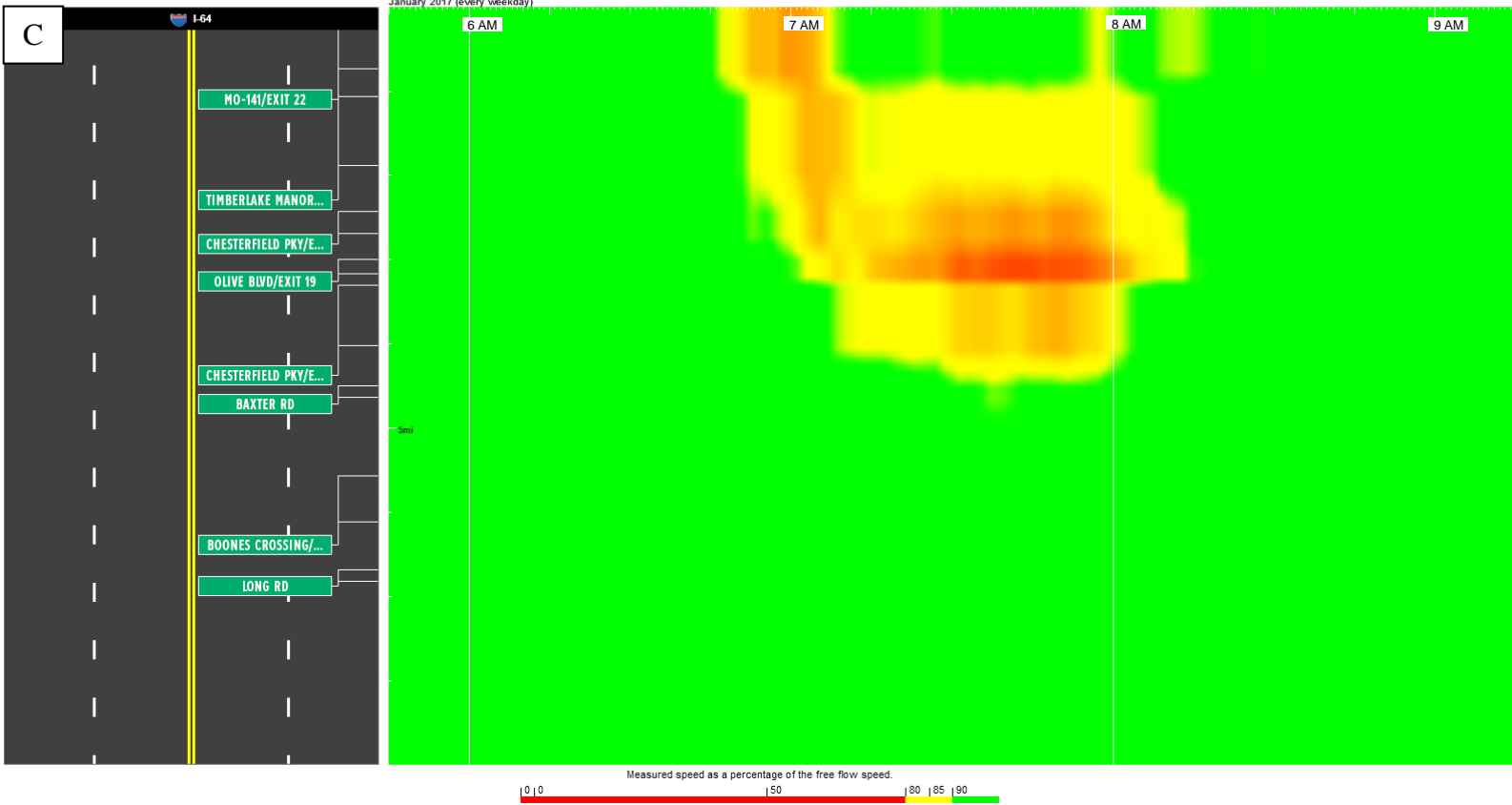




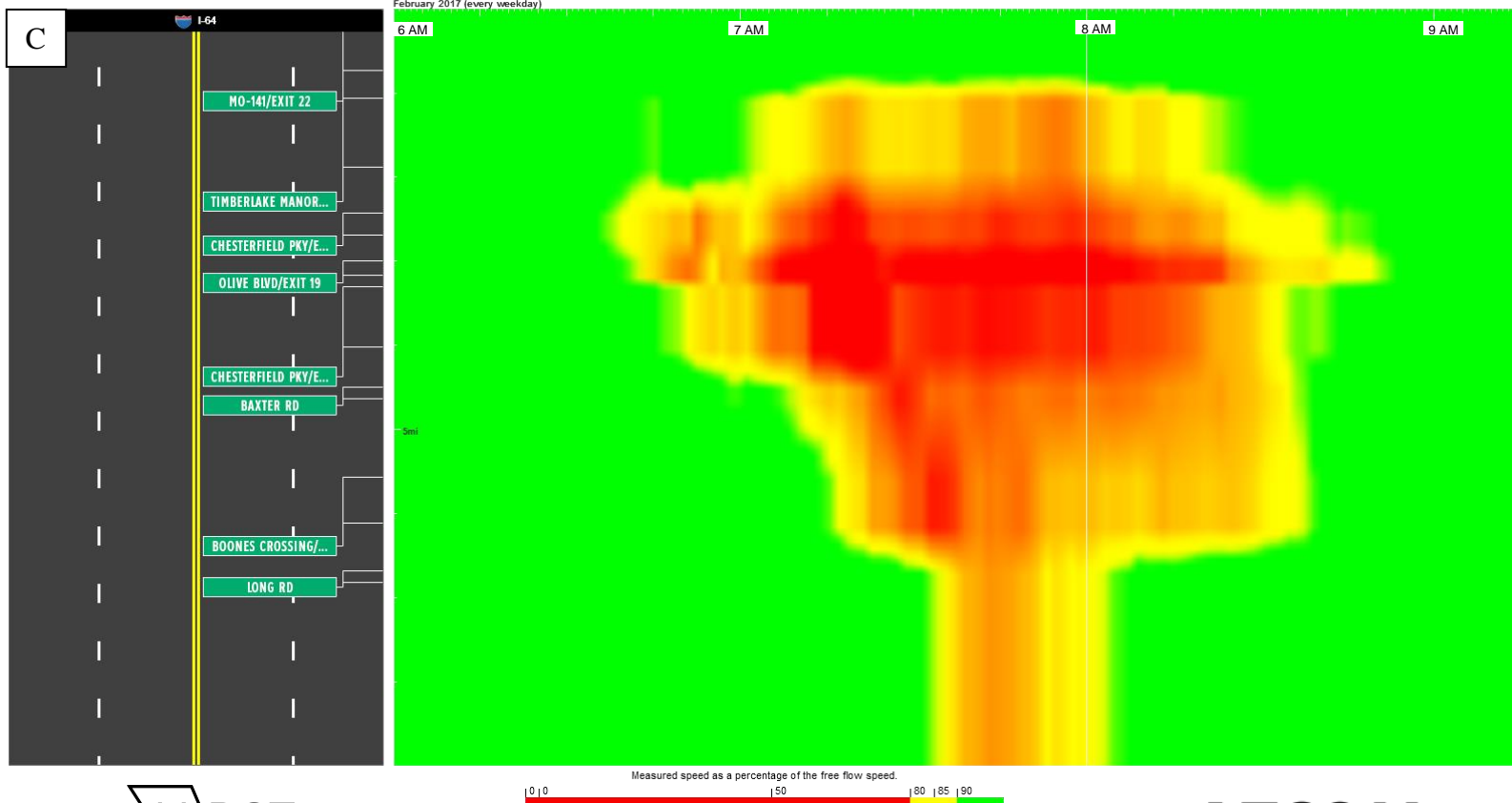


# FREEWAY MANAGEMENT

Congestion on I-64 Eastbound between Long Rd and MO-141/Exit 22 using HERE data  
Averaged by 2 minutes for January 2017 (every weekday)



Congestion on I-64 Eastbound between Long Rd and MO-141/Exit 22 using HERE data  
Averaged by 2 minutes for February 2017 (every weekday)

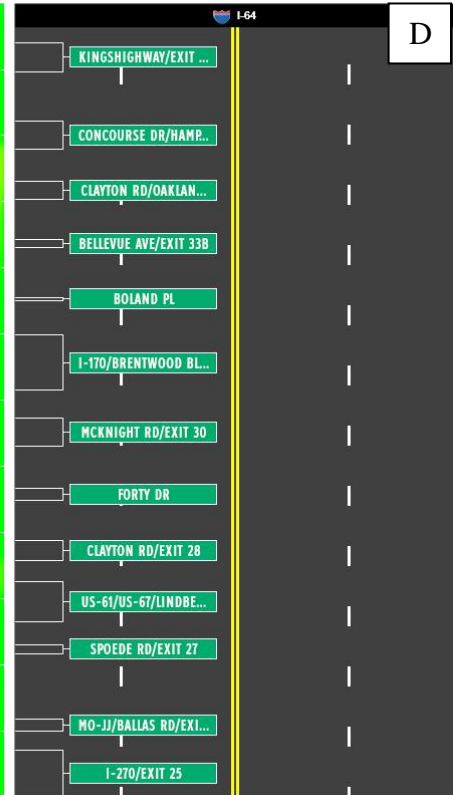
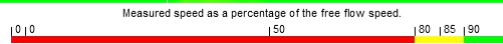
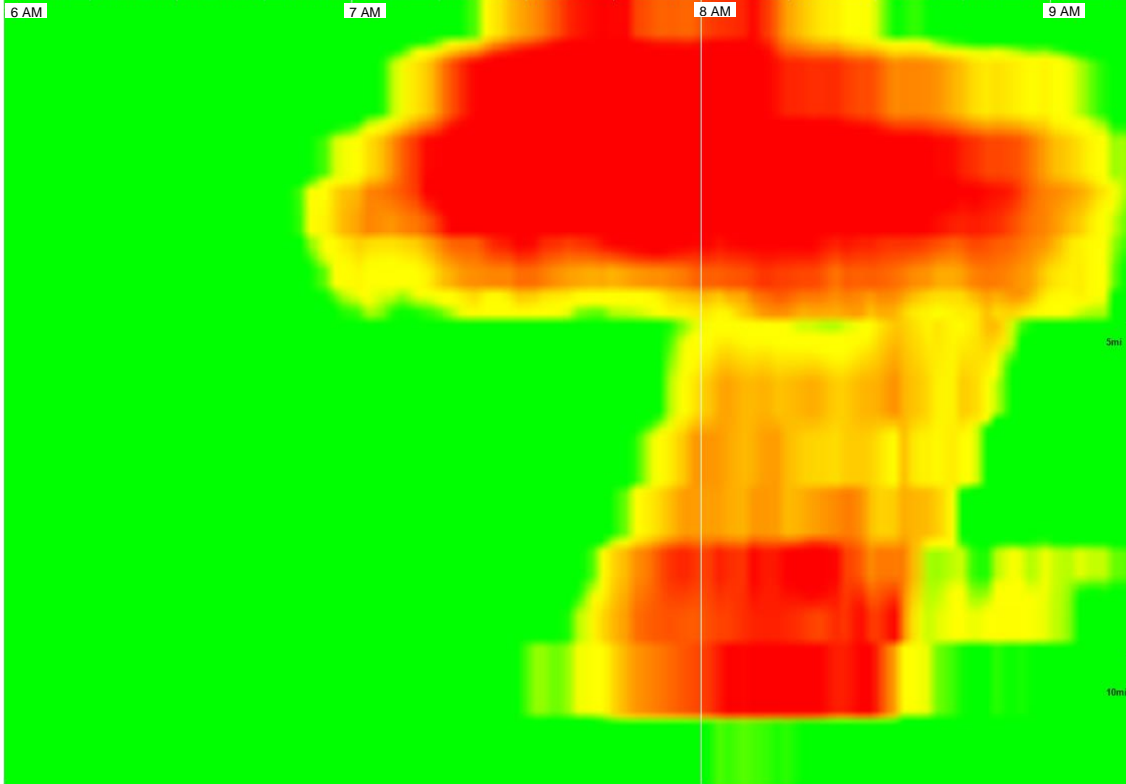


# FREEWAY MANAGEMENT

Congestion on I-64 Westbound between Kingshighway/Exit 36 and I-270/Exit 25 using HERE data  
Averaged by 2 minutes for January 2017 (every weekday)

Westbound

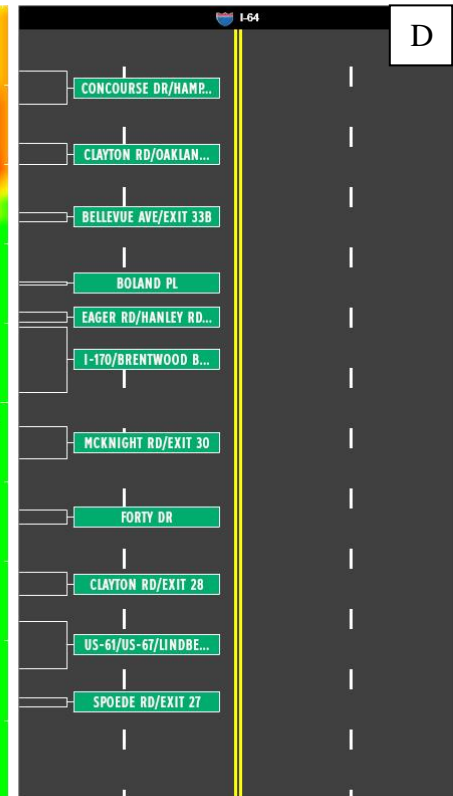
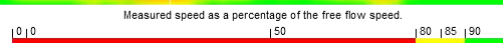
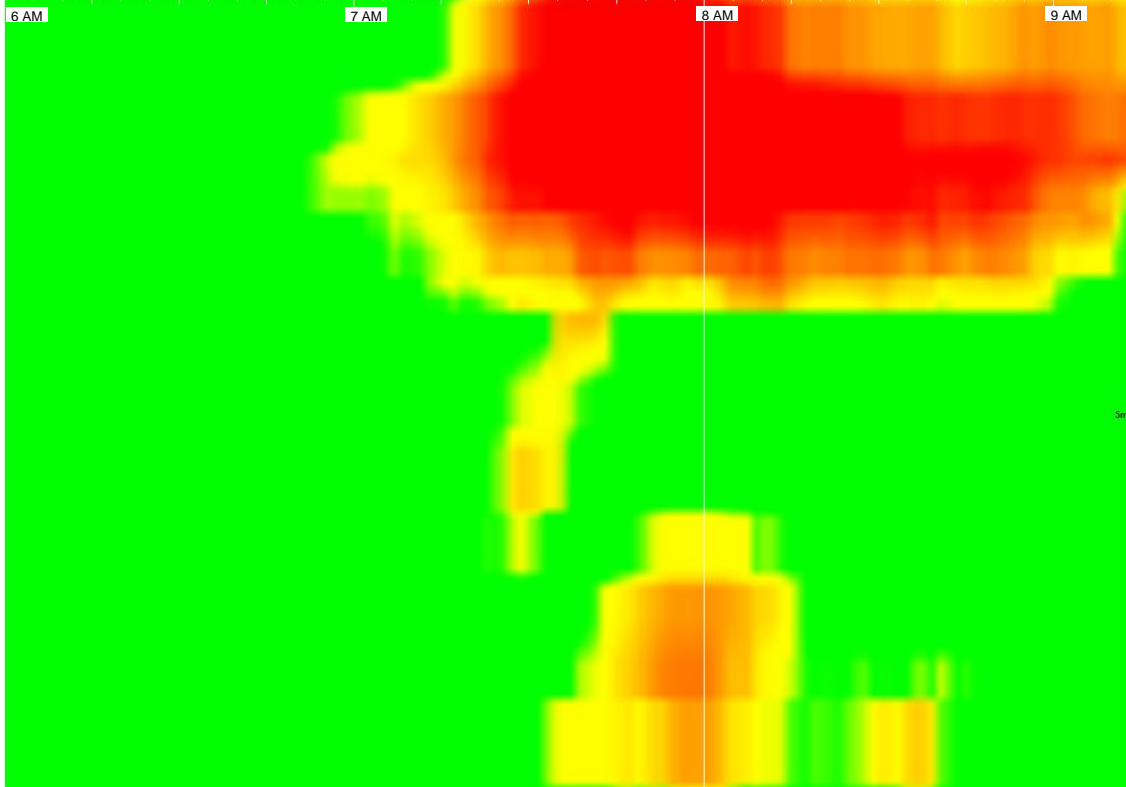
January 2017 (every weekday)



Congestion on I-64 Westbound between Kingshighway/Exit 36 and I-270/Exit 25 using HERE data  
Averaged by 2 minutes for February 2017 (every weekday)

Westbound

February 2017 (every weekday)





# FREEWAY MANAGEMENT

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## PM PEAK PERIOD MOBILITY JANUARY 2017

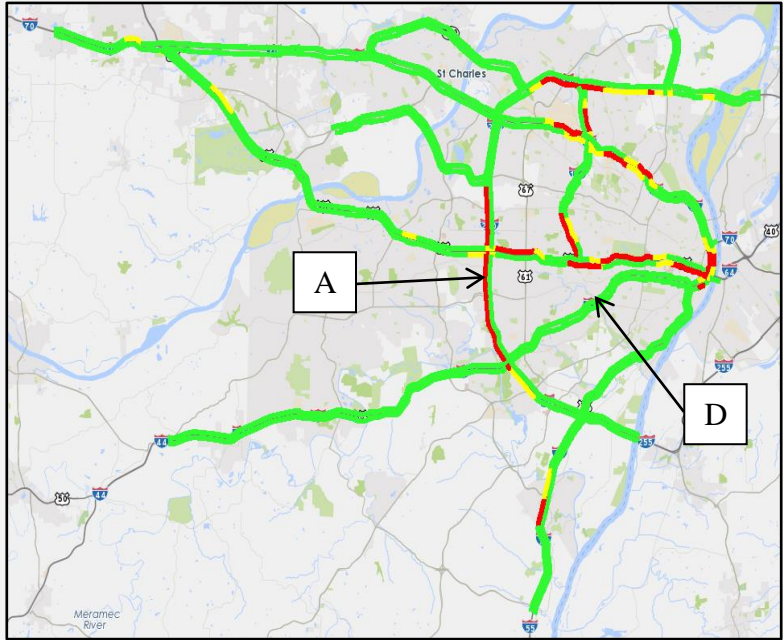
4 pm – 5 pm

### LEGEND (Speed Index)

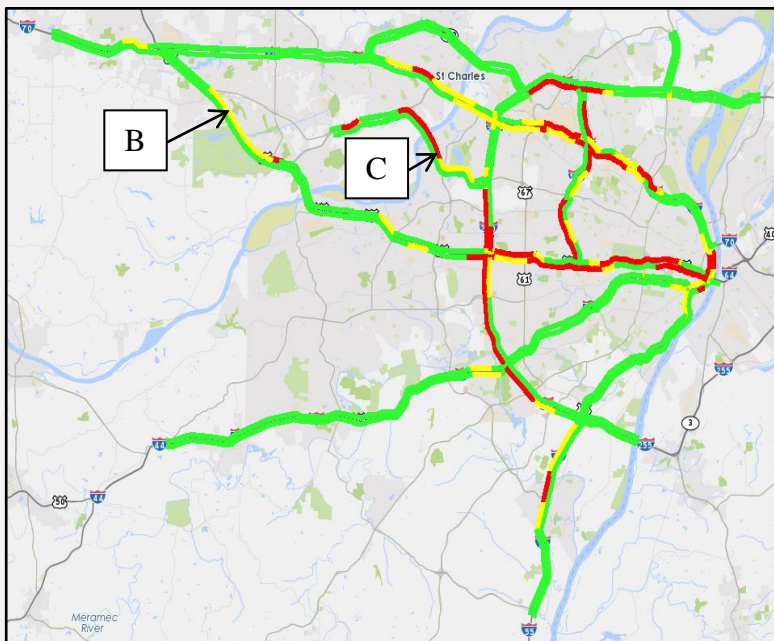
- High Mobility (.90+)
- Medium Mobility (.80-.90)
- Low Mobility (< .80)

### Highlighted Heat Map Locations

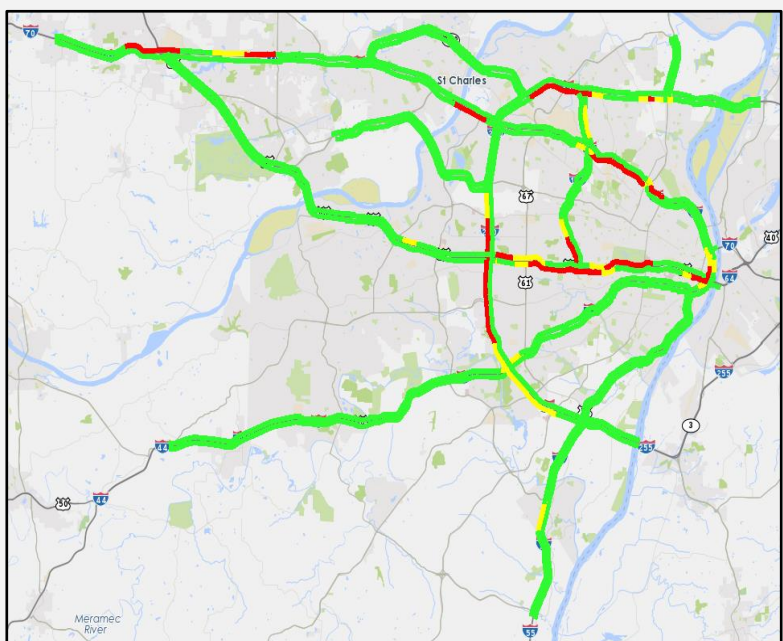
- A. SB I-270 from Dorsett to I-55
- B. WB I-64 from MO 94 to I-70
- C. WB MO 364 from I-270 to MO 94
- D. WB I-44 from I-55 to I-270



5 pm – 6 pm



6 pm – 7 pm





# FREEWAY MANAGEMENT

## PM PEAK PERIOD MOBILITY FEBRUARY 2017

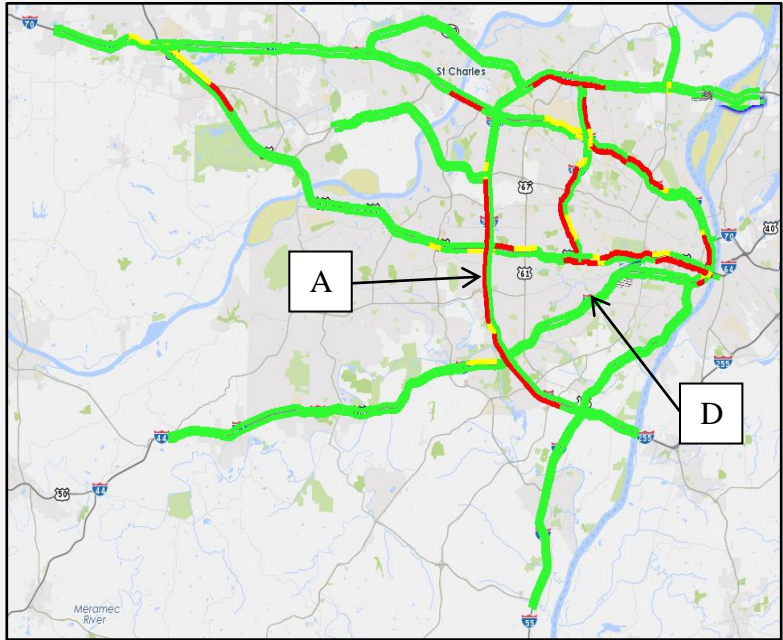
4 pm – 5 pm

### LEGEND (Speed Index)

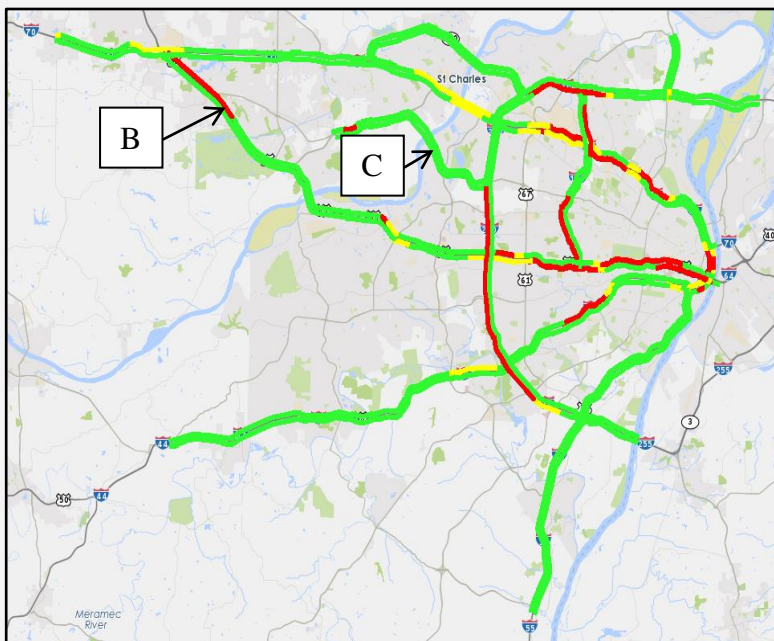
- High Mobility (.90+)
- Medium Mobility (.80-.90)
- Low Mobility (< .80)

### Highlighted Heat Map Locations

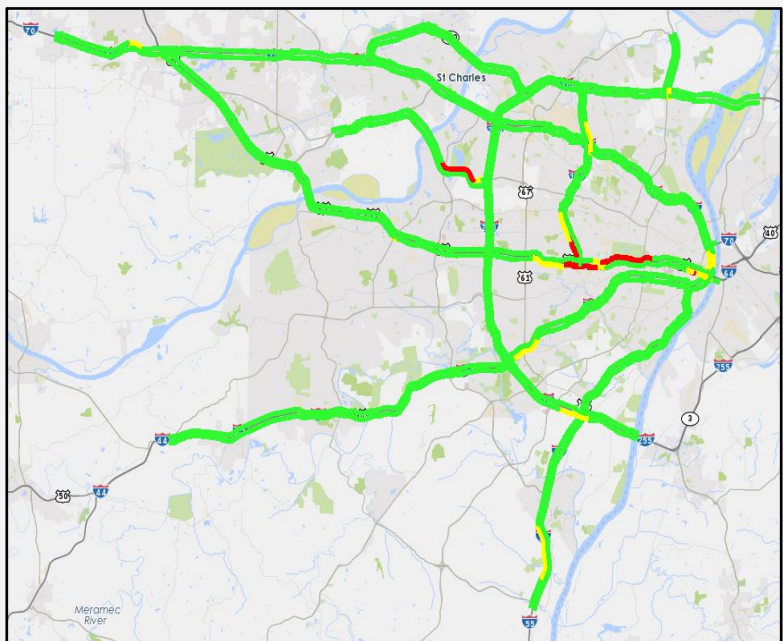
- A. SB I-270 from Dorsett to I-55
- B. WB I-64 from MO 94 to I-70
- C. WB MO 364 from I-270 to MO 94
- D. WB I-44 from I-55 to I-270



5 pm – 6 pm



6 pm – 7 pm

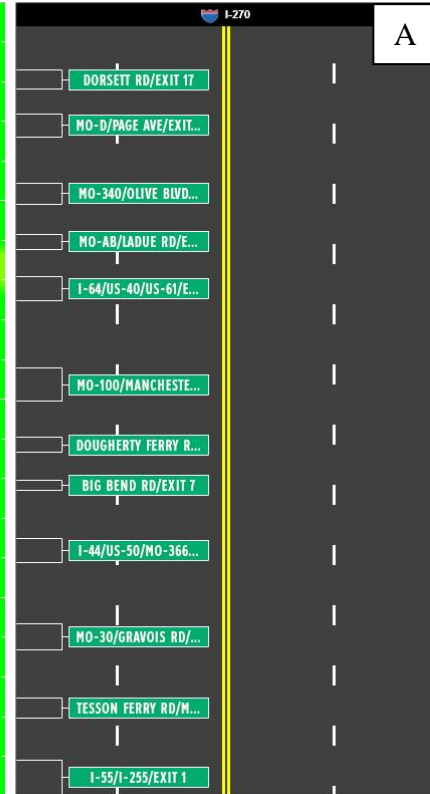
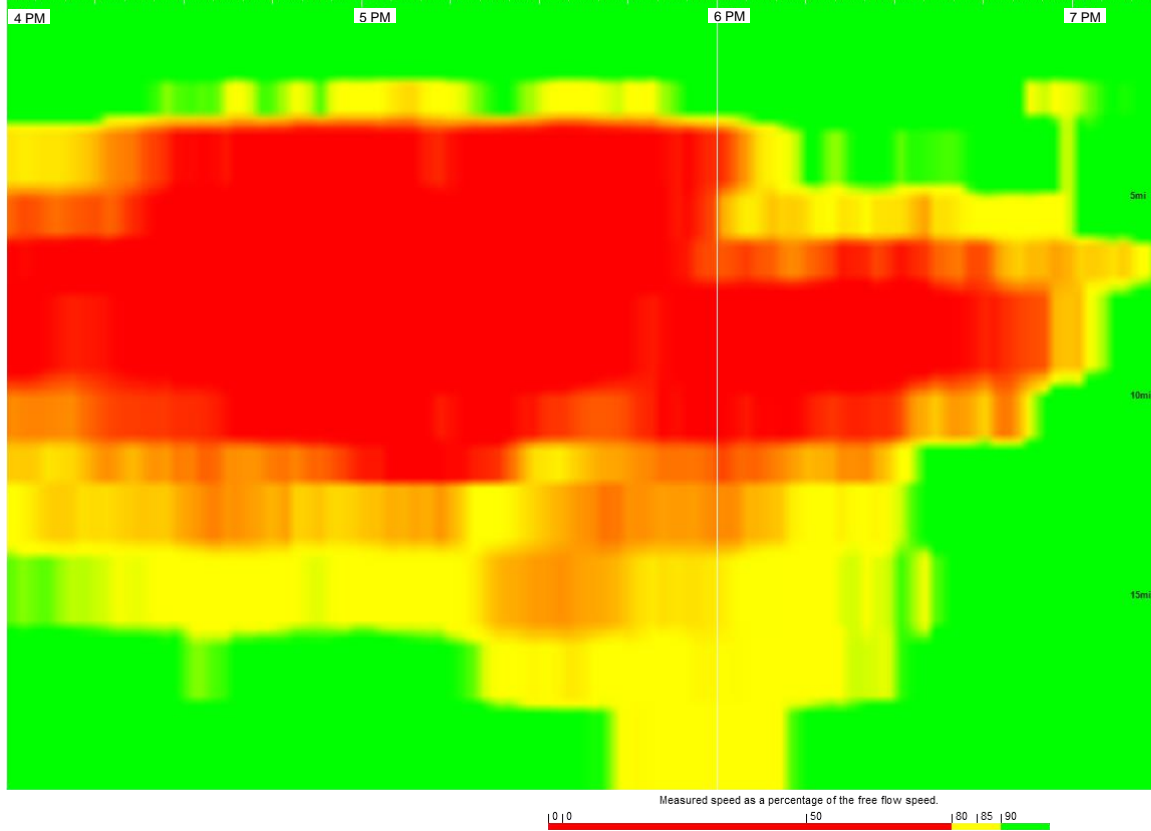


# FREEWAY MANAGEMENT

Congestion on I-270 Southbound between Dorsett Rd/Exit 17 and I-55/I-255/Exit 1 using HERE data  
Averaged by 2 minutes for January 2017 (every weekday)

January 2017 (every weekday)

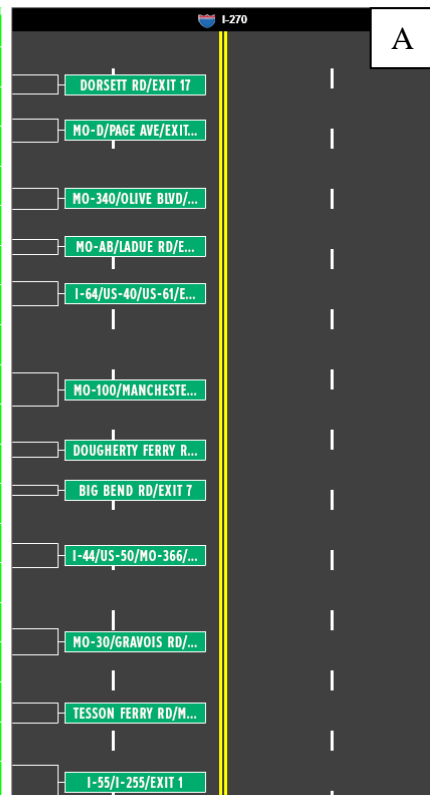
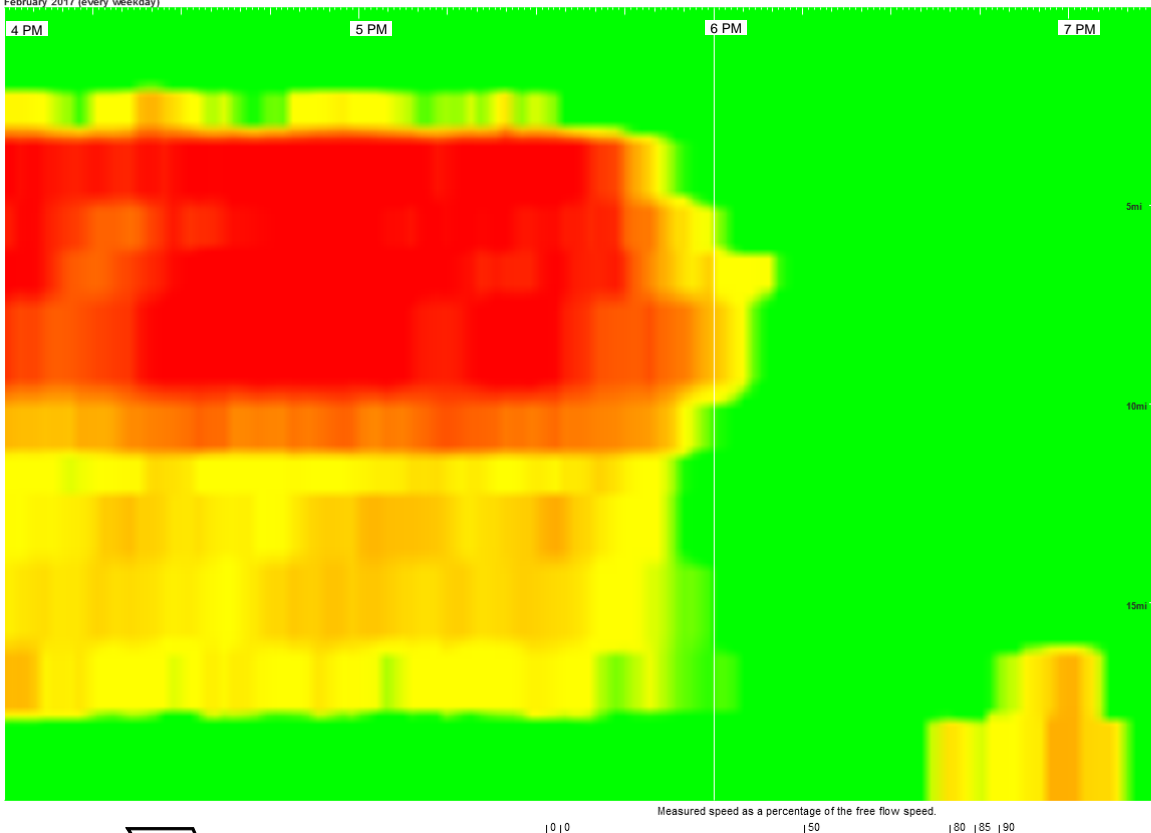
Southbound



Congestion on I-270 Southbound between Dorsett Rd/Exit 17 and I-55/I-255/Exit 1 using HERE data  
Averaged by 2 minutes for February 2017 (every weekday)

February 2017 (every weekday)

Southbound



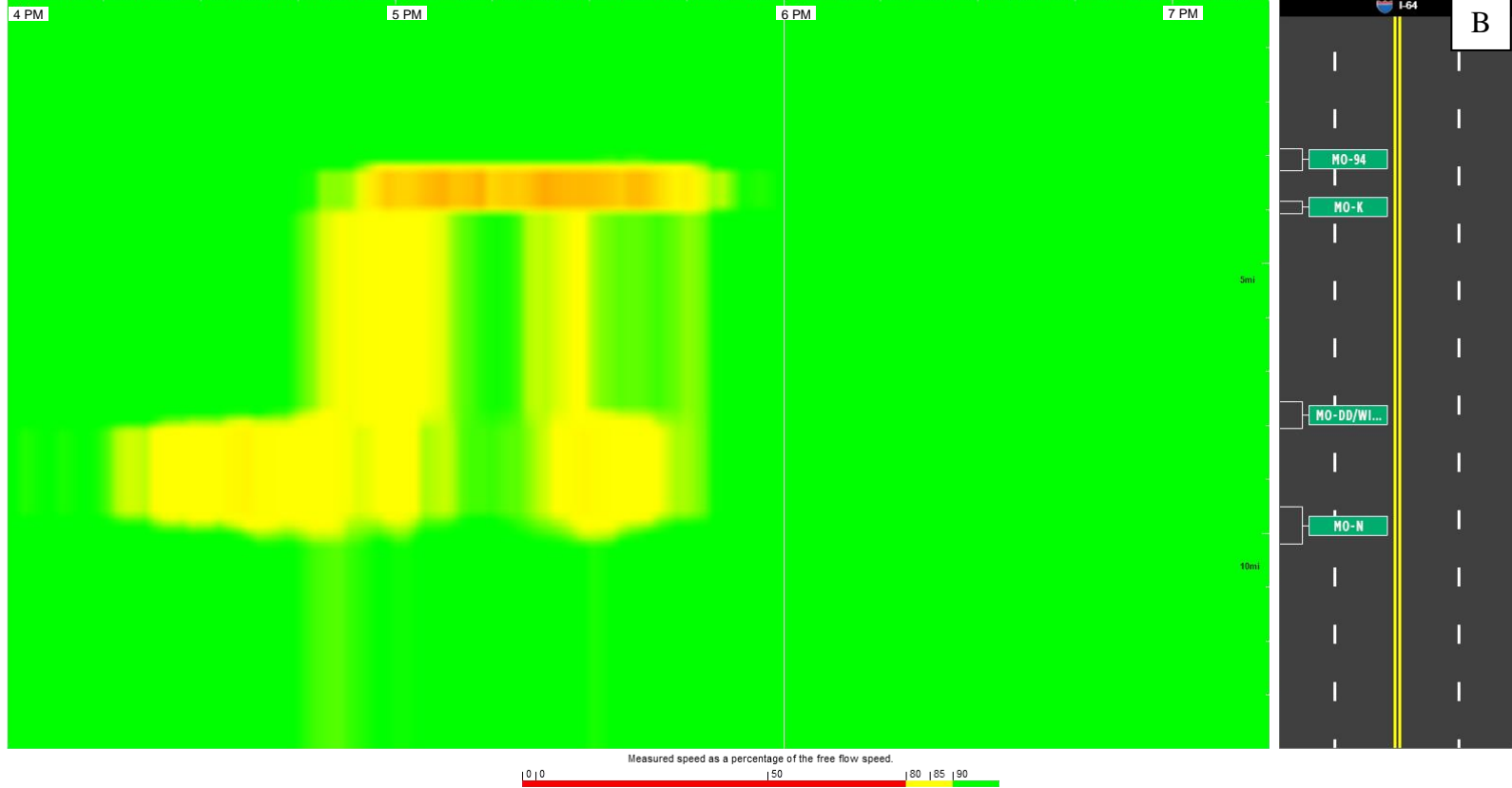
# FREEWAY MANAGEMENT

Congestion on I-64 Westbound between MO-94 and I-70 using HERE data

Averaged by 2 minutes for January 2017 (every weekday)

Westbound

January 2017 (every weekday)

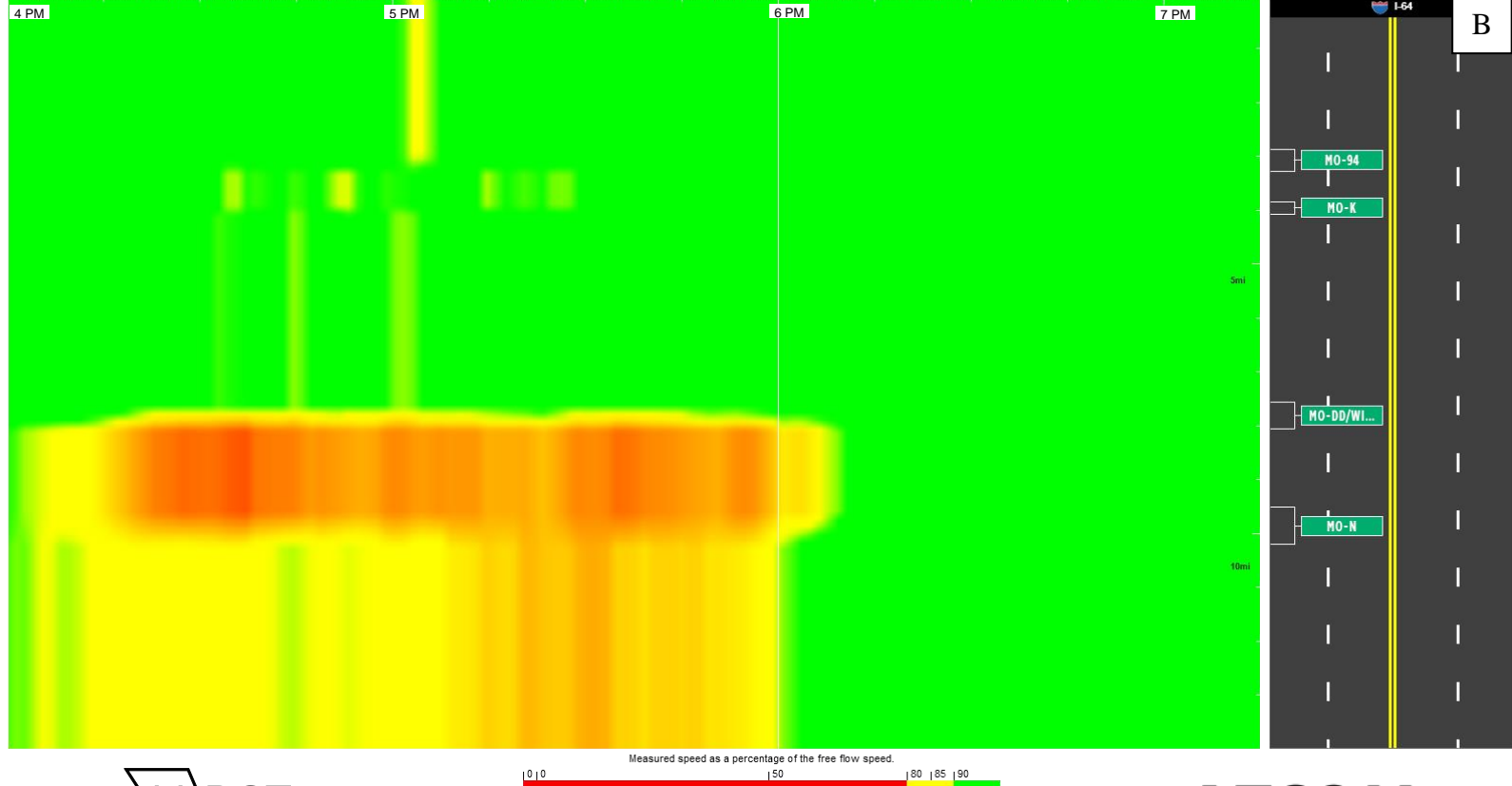


Congestion on I-64 Westbound between MO-94 and I-70 using HERE data

Averaged by 2 minutes for February 2017 (every weekday)

Westbound

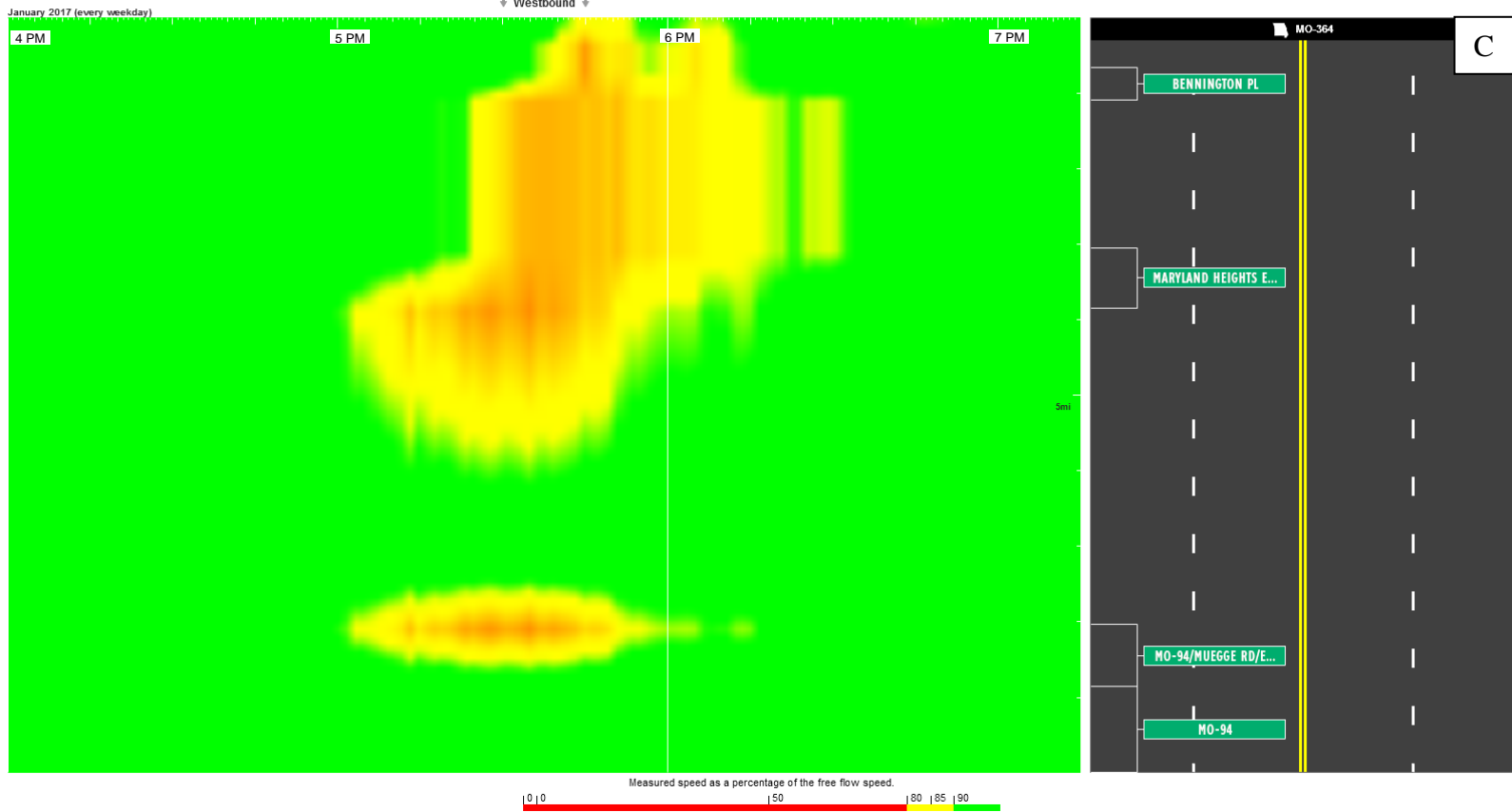
February 2017 (every weekday)



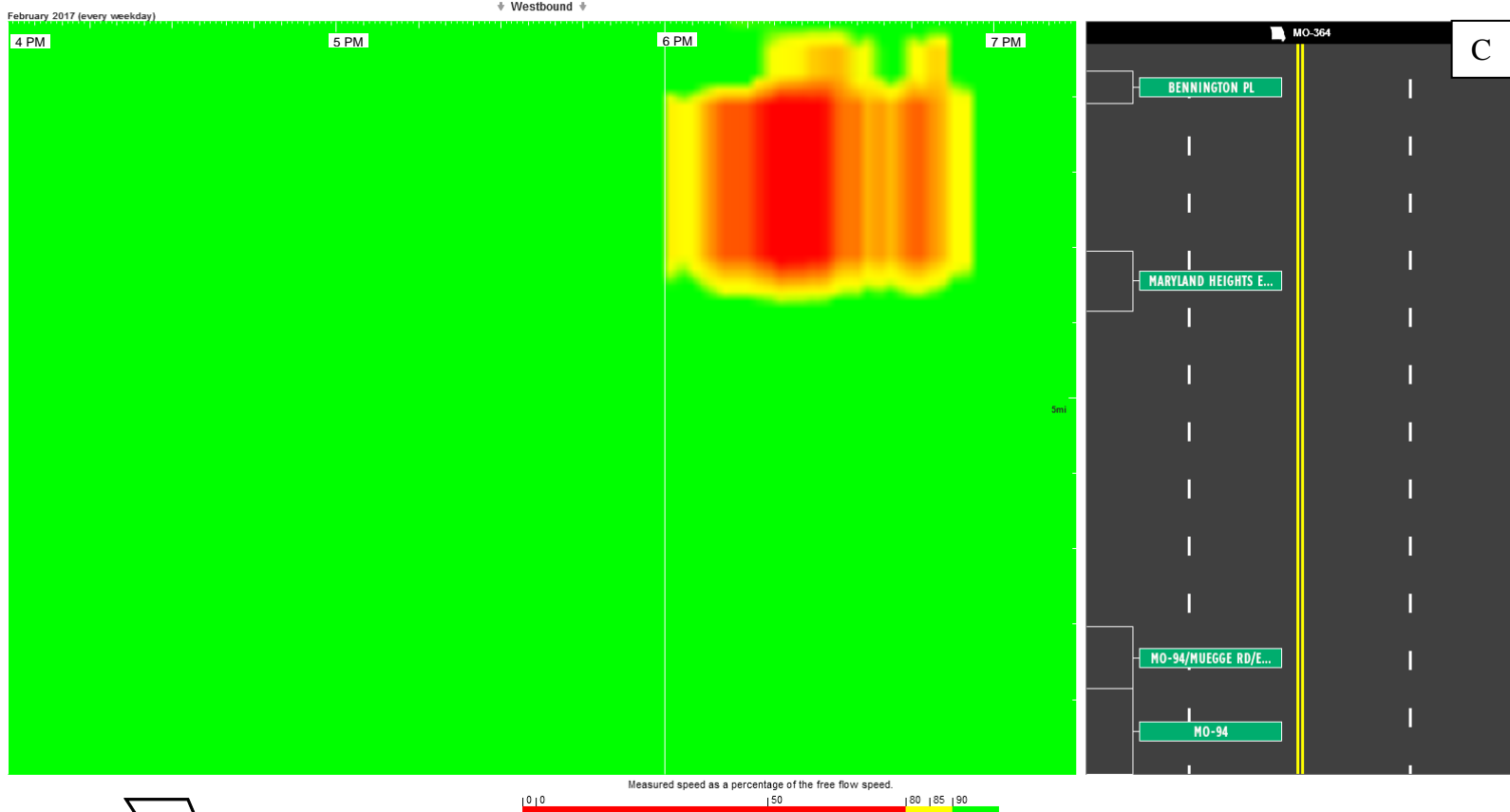


# FREEWAY MANAGEMENT

Congestion on MO-364 Westbound between MO-94 and I-270/MO-D using HERE data  
Averaged by 2 minutes for January 2017 (every weekday)



Congestion on MO-364 Westbound between MO-94 and I-270/MO-D using HERE data  
Averaged by 2 minutes for February 2017 (every weekday)



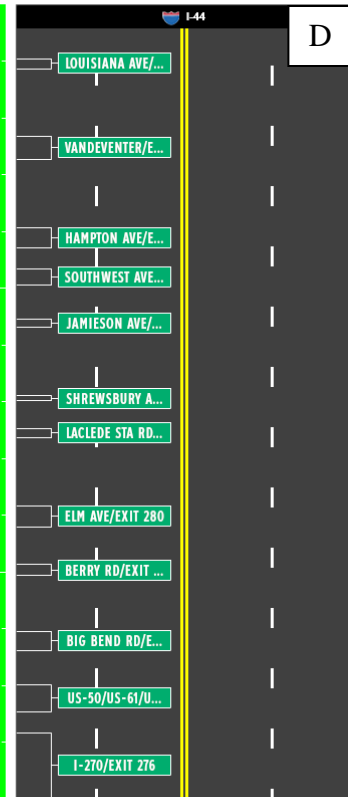
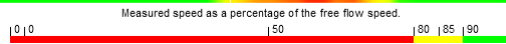
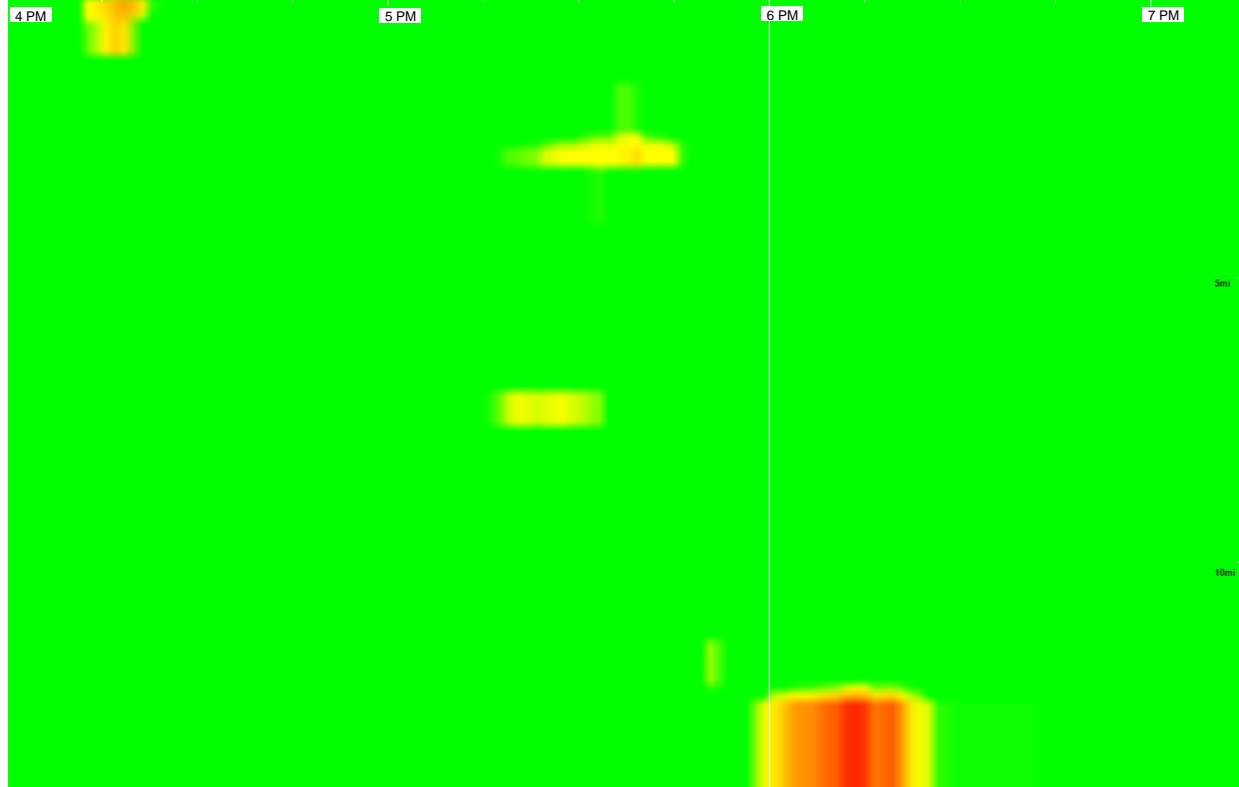


# FREEWAY MANAGEMENT

Congestion on I-44 Westbound between I-55/Exit 290 and I-270/Exit 276 using HERE data  
Averaged by 2 minutes for January 2017 (every weekday)

Westbound

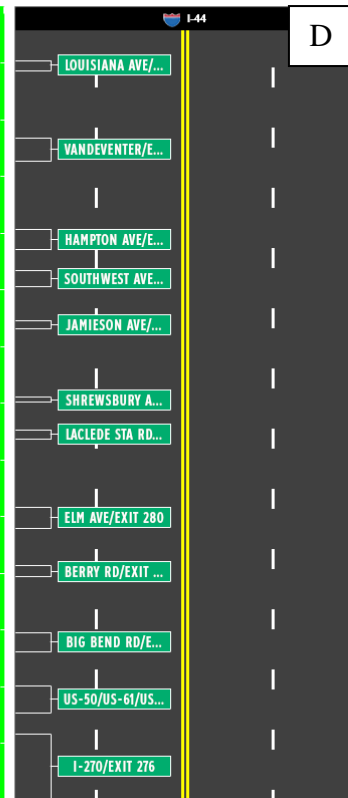
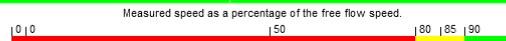
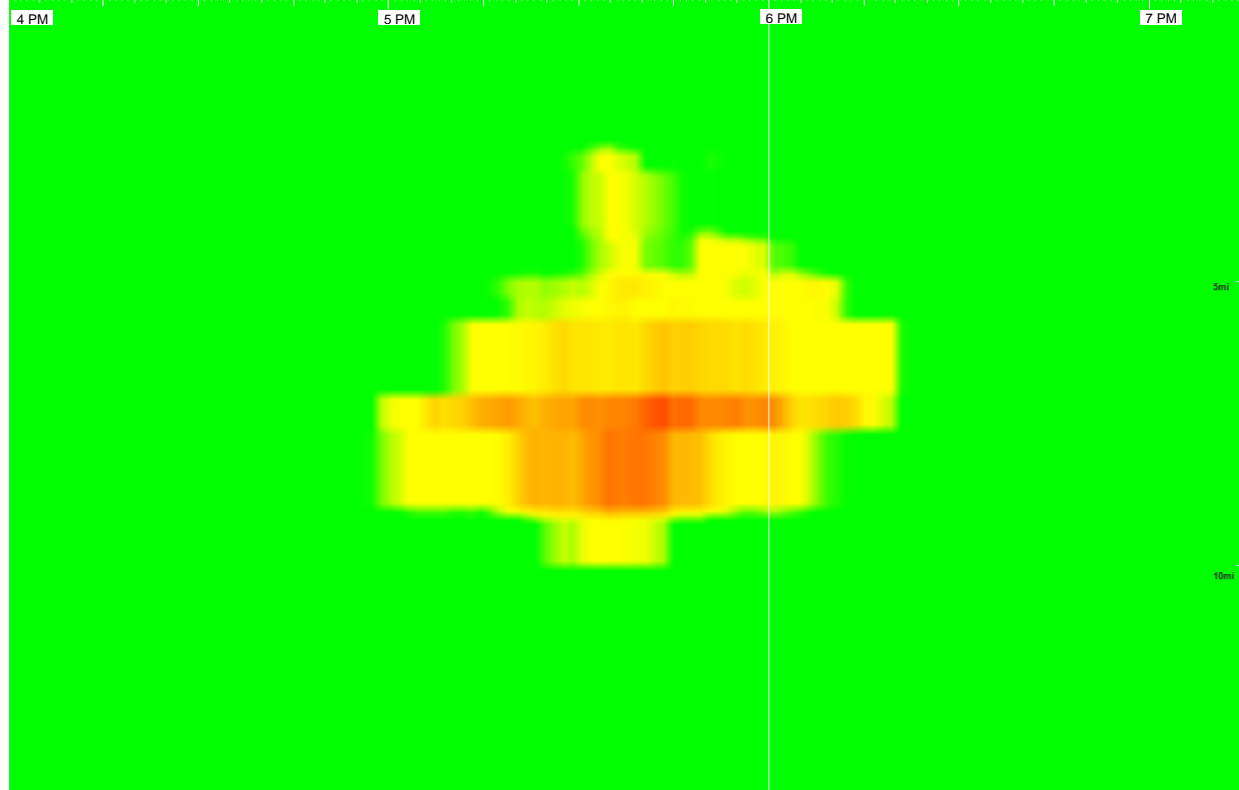
January 2017 (every weekday)



Congestion on I-44 Westbound between I-55/Exit 290 and I-270/Exit 276 using HERE data  
Averaged by 2 minutes for February 2017 (every weekday)

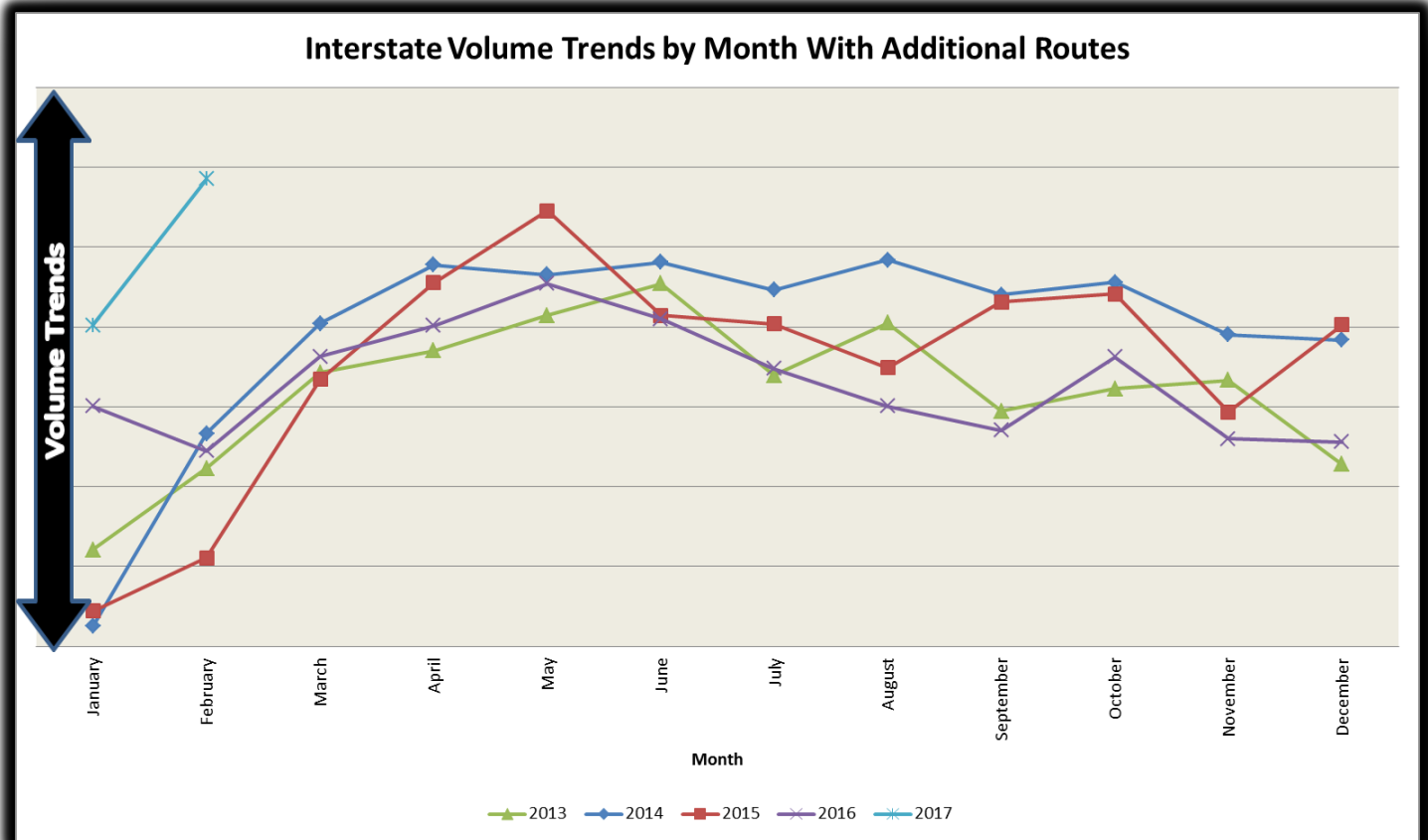
Westbound

February 2017 (every weekday)





# FREEWAY MANAGEMENT

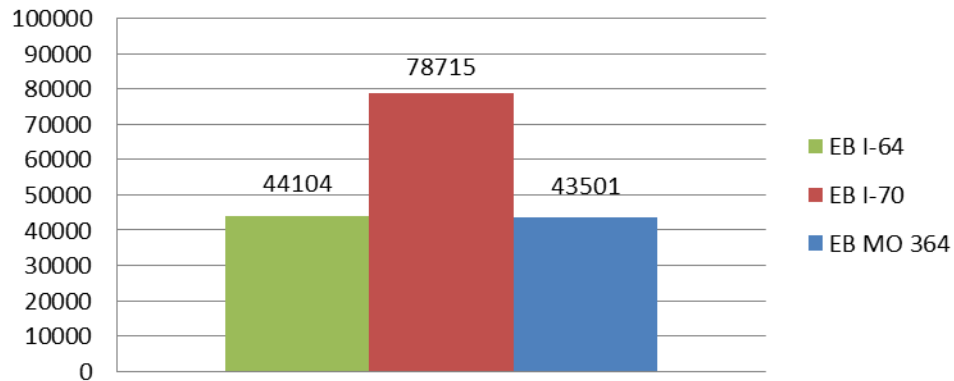


NEW for 2017! The focus area for calculating the average 24 hour volumes was revisited to include all SL District Urban Freeways including Route 364 from I-64 to I-270, Route 367 from I-270 to Route 67, and Route 370 from I-70 to I-270. Starting in 2017, these freeways will be included in this calculation while 2013-2016 will be based on the original urban interstate calculation.

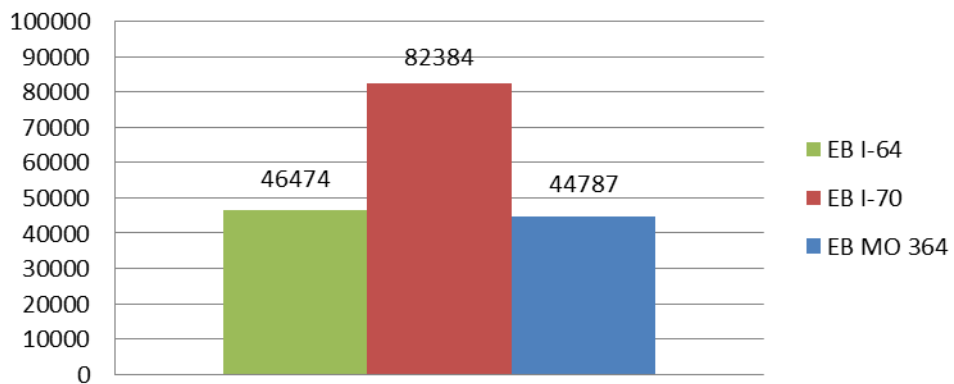


# FREEWAY MANAGEMENT

**Jan 2017 EB MO River Crossings  
Total = 166,320**



**Feb 2017 EB MO River Crossings  
Total = 173,645**

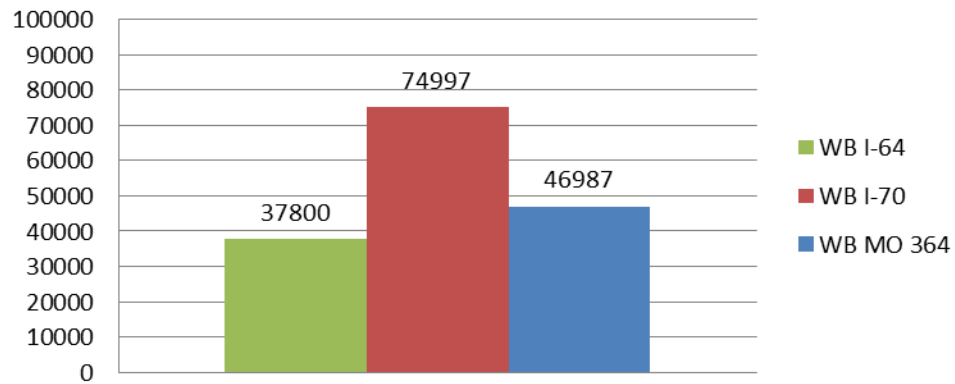




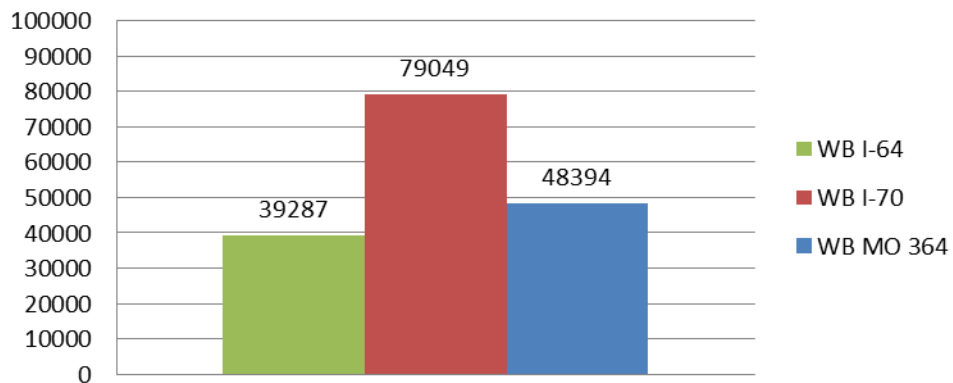


# FREEWAY MANAGEMENT

**Jan 2017 WB MO River Crossings  
Total = 159,784**

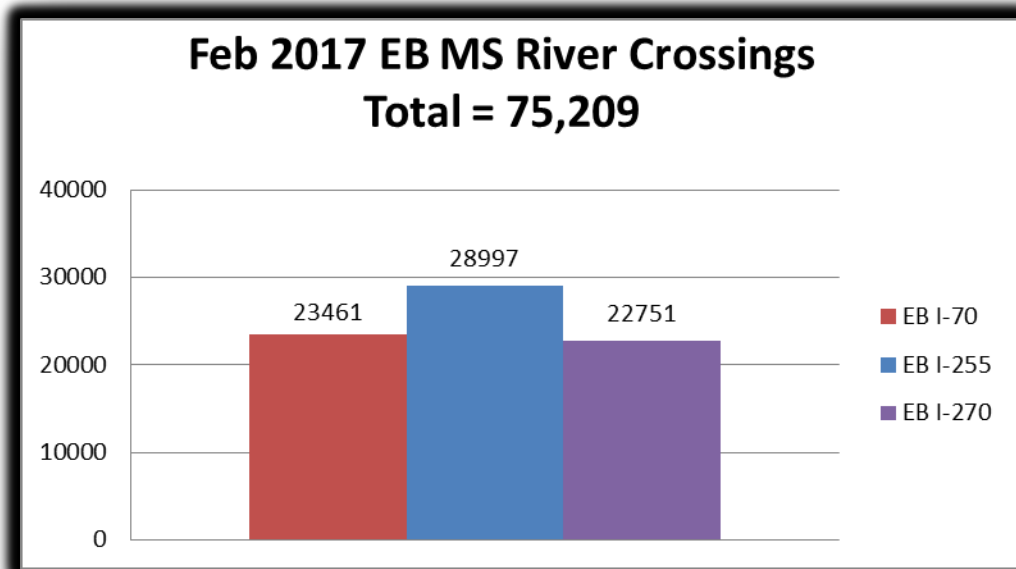
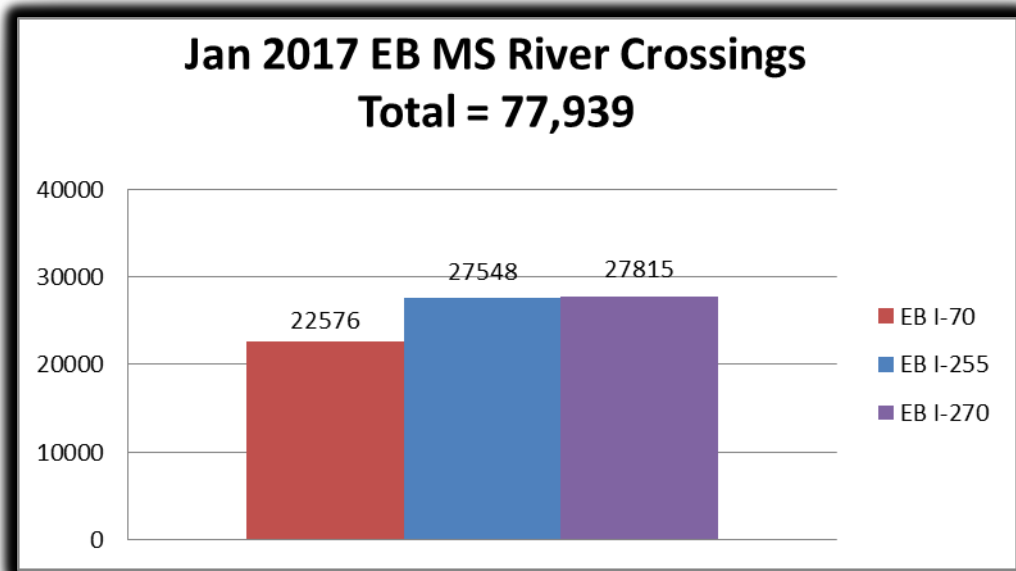


**Feb 2017 WB MO River Crossings  
Total = 166,730**



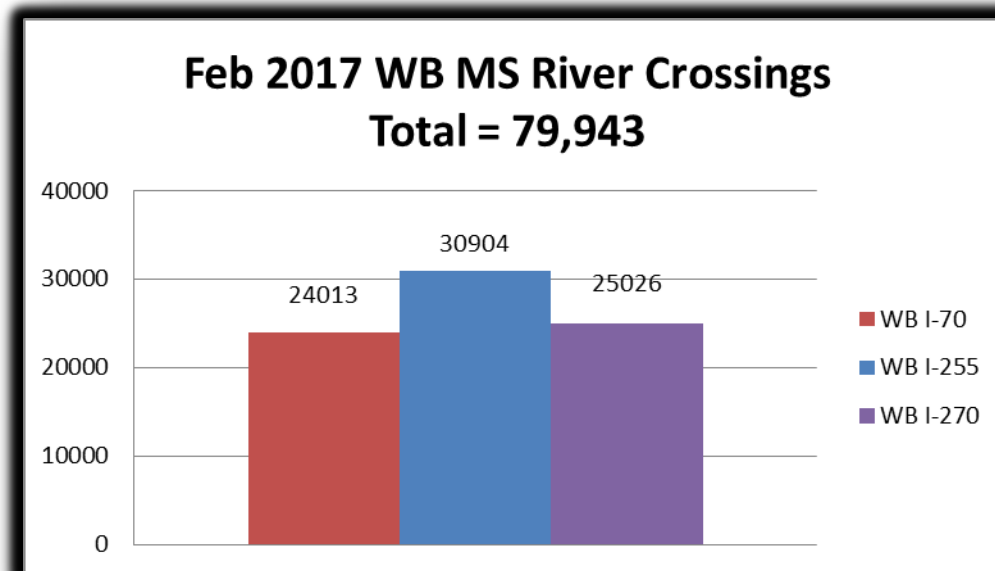
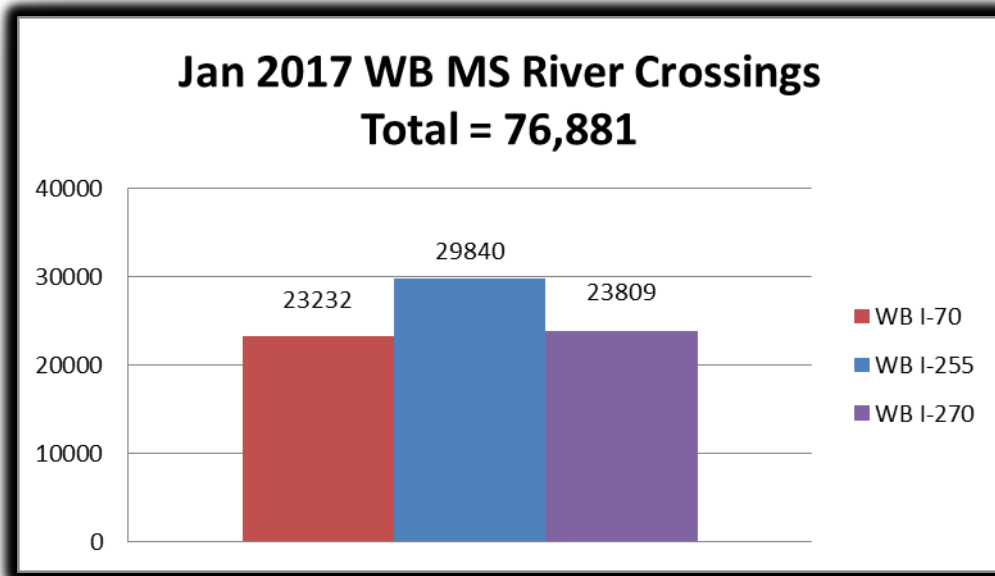


# FREEWAY MANAGEMENT





# FREEWAY MANAGEMENT







# FREEWAY MANAGEMENT

## Eastbound Westbound I-64 Lane Addition Impact Analysis

### *What was the problem?*

*During the morning and evening commutes, much of I-64 was congested between I-270 and Route 340 (Olive Boulevard/Clarkson Road). Nearly 150,000 vehicles travel this section of roadway, and in 20 years, that number is expected to increase to more than 175,000 vehicles. The levels of eastbound congestion in the morning and westbound congestion in the evening were cause for improvements along this corridor.*



BEFORE



AFTER

*With the addition of the new 5th lane on Eastbound I-64 between Route 141 and I-270, the off-ramp to Maryville Center and the on-ramp before Mason Road moved further to the east:*

- *Eastbound I-64 average speeds have increased in both AM and PM Peaks*
- *Average speeds have become more stable during AM and PM peaks*
- *Drivers should expect to see smoother traffic conditions*

*With the Westbound I-64 lane addition from I-270 to Route 340:*

- *Westbound I-64 average speeds have increased in both AM and PM Peaks*
- *Traffic has metered closer to I-270*

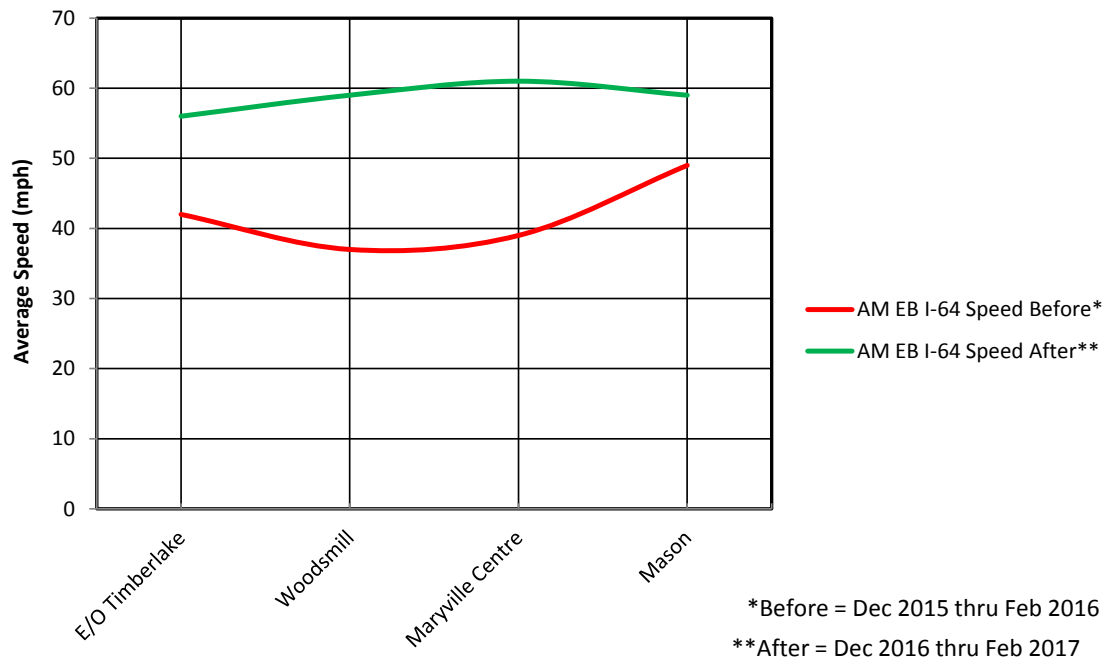
*See the following two pages for AM/PM Peak speed data charts. Future reports will contain analysis of traffic volume data.*



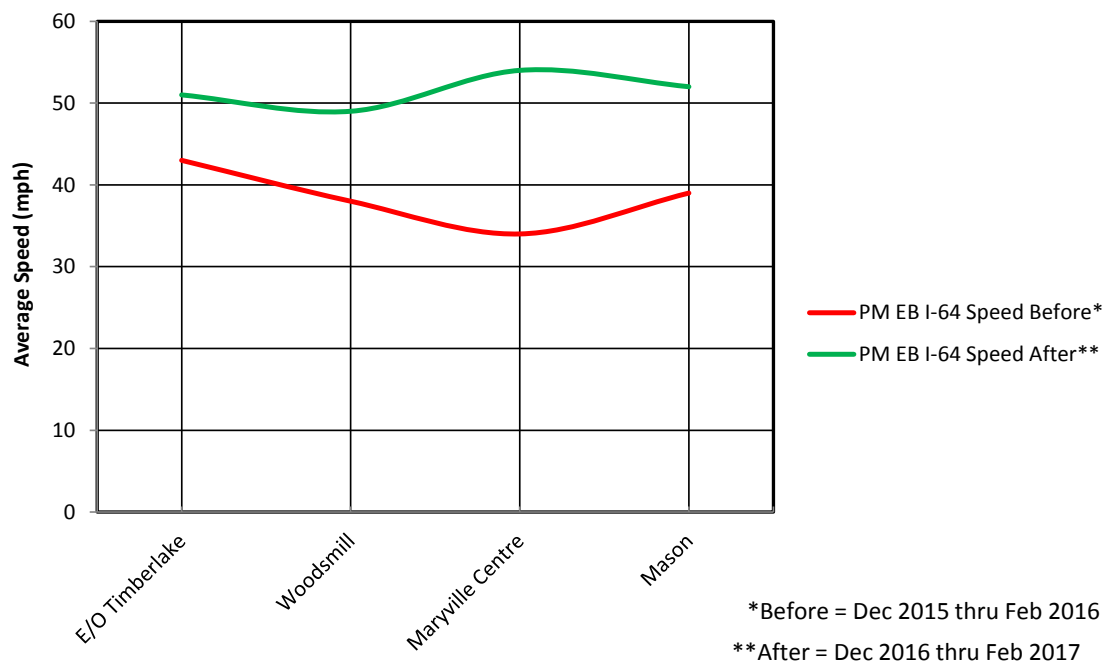
# FREEWAY MANAGEMENT

## Eastbound Westbound I-64 Lane Addition Impact Analysis

### Eastbound I-64 AM (6am - 9am) Summary



### Eastbound I-64 PM (4pm - 7pm) Summary

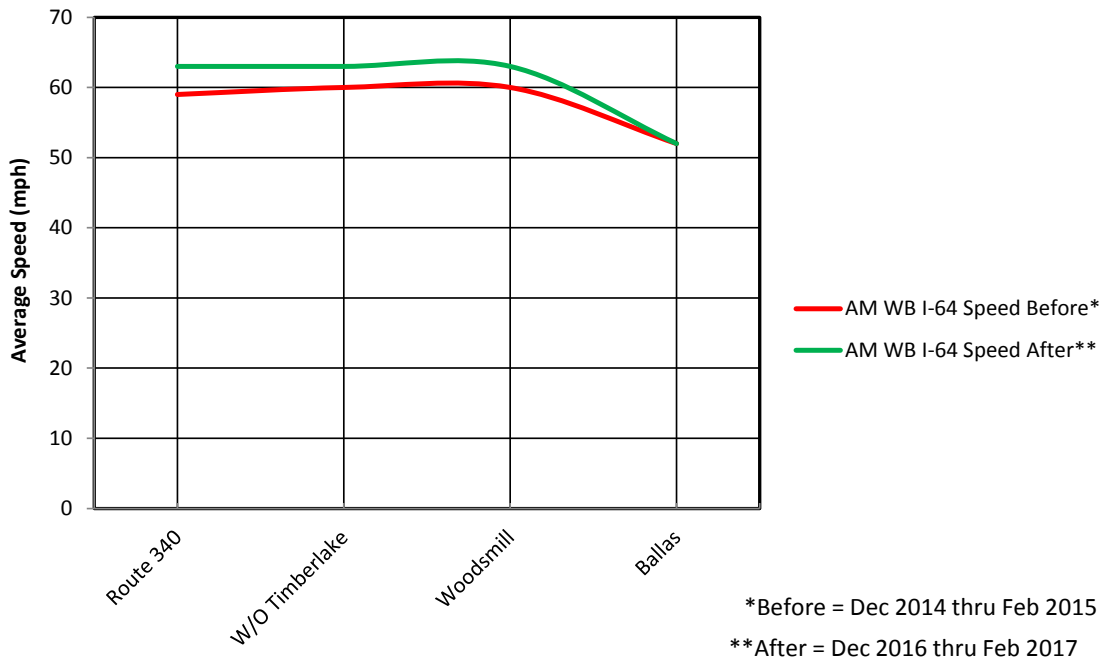




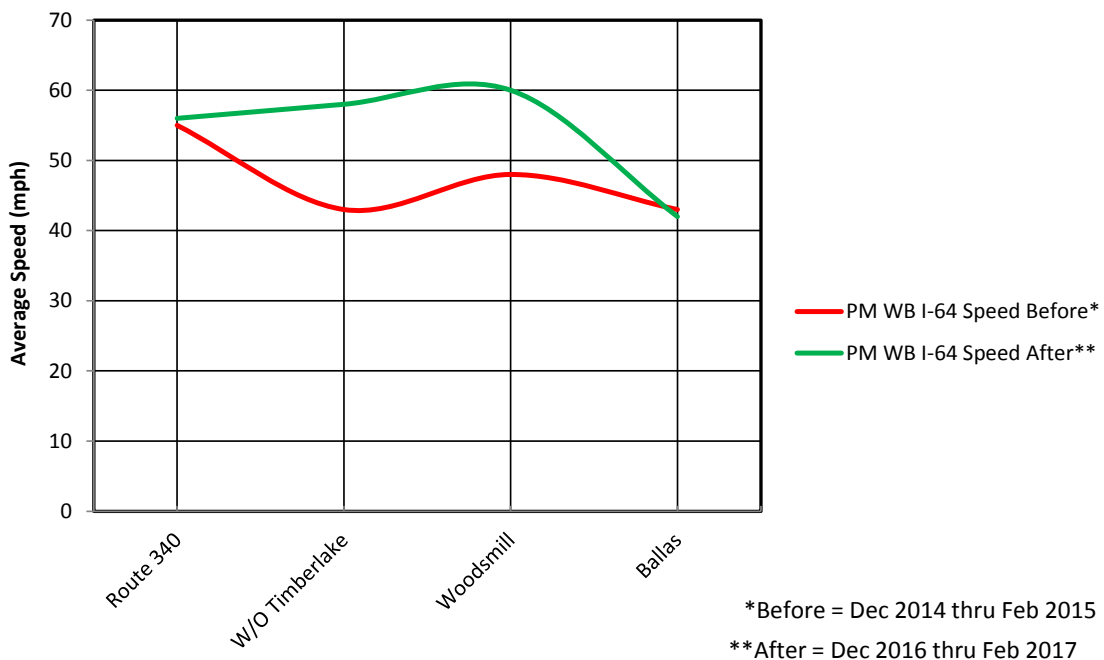
# FREEWAY MANAGEMENT

## Eastbound Westbound I-64 Lane Addition Impact Analysis

### Westbound I-64 AM (6am - 9am) Summary



### Westbound I-64 PM (4pm - 7pm) Summary



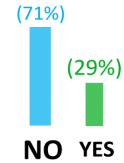
# ARTERIAL MANAGEMENT



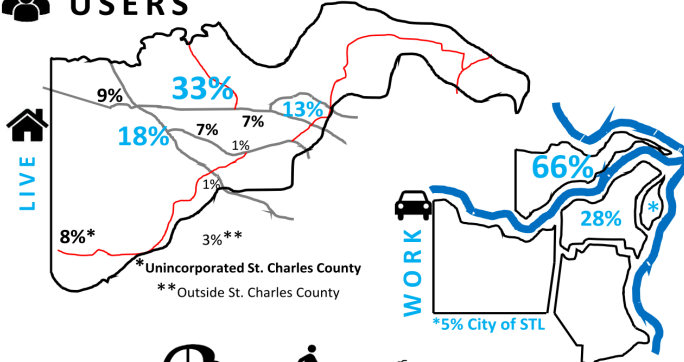
## Citizen Survey Results



Are you familiar with GGL?

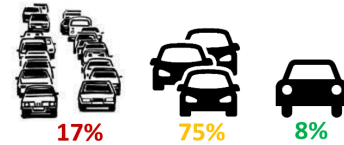


### USERS



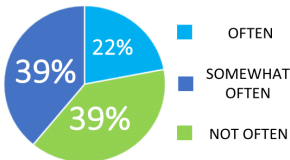
### CONGESTION

Perception of congestion?

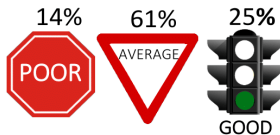


### CONSTRUCTION

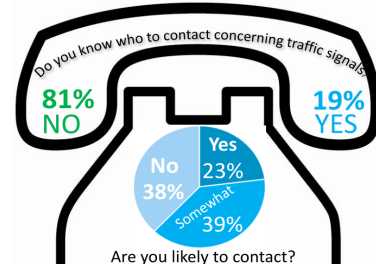
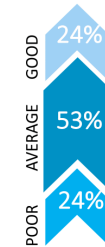
How often are you impacted by construction?



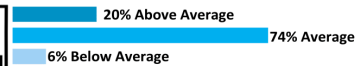
Traffic management during construction is...



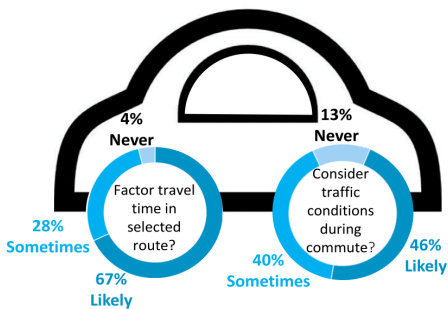
### OPERATIONS



Do you think any signals are not operating properly?



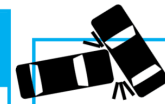
### YOUR COMMUTE



Alter route based on electronic message signs?



What form of media are you most likely to check before you start your commute?



Leading contributor to crashes? (ranked in order)

1. Unpredictable driver behavior
2. Speed
3. Unexpected stops due to poorly coordinated signal traffic
4. Confusing lane markings
5. Unclear signing
6. Sight distance
7. Intersection lighting

<http://www.sccmo.org/210/Gateway-Green-Light>



## Work Zones

Whenever additional travel time is reported, this additional time shall be evaluated using this chart and adequate mitigation measures should begin within the parameters of this chart. TMC and field personnel are partners in the mitigation of traffic and notification of additional travel times should trigger the appropriate response from both parties.

Chart is designed to be an additional travel time reference to establish parameters for gauging the travel impact through work zones and to provide guidance for taking mitigation actions. Travel times can be collected or reported via Blue Toad technology, field personnel, call reports, ITS, TMC cameras, etc.

Major and Moderate impacts trigger an IAR (Immediate Action Required) event. IAR means work zone user and TMC partner together to take immediate actions to reduce or eliminate distress. During an IAR event mitigation procedures can range from increased driver notification up to and including removal of work zone. Additional mitigation procedures may require involvement of administration through use of the work zone resolution ladder.

Level of Impact	Additional Travel Time Expected	Mitigation Actions
<p><b>Major (Red)</b> <b><u>IAR Event</u></b></p> <p>SEVERE DISTRESS PRESENT</p> <p><b>Return of roadway to free flow traffic is Priority #1</b></p>	<p>15 minutes or above</p> <p>TMC and field personnel take all steps possible up to and including removal of lane closure to achieve free flow threshold</p>	<p><b>Immediate Action Required</b></p> <p>Supervisory mitigation assistance is required using the St. Louis District Work Zone Resolution Ladder as a tool to restore free flow traffic threshold</p>
<p><b>Moderate (Yellow)</b> <b><u>IAR Event</u></b></p> <p>CAUTIONARY STAGE:</p> <p><b>Action required by Field/ TMC to prevent escalation to a major event</b></p>	<p>10 – 14 minutes</p> <p>TMC increases driver messaging. Field begins efforts to restore free flow traffic</p>	<p>TMC and field shall reach a consensus on mitigation success within 15 minutes or less. If a consensus cannot be reached, mitigation should be scaled upwards in accordance with the St. Louis District Work Zone Resolution Ladder</p>



## Incident Levels

### **Major Impact Traffic Incident – Road closure > 2 hours**

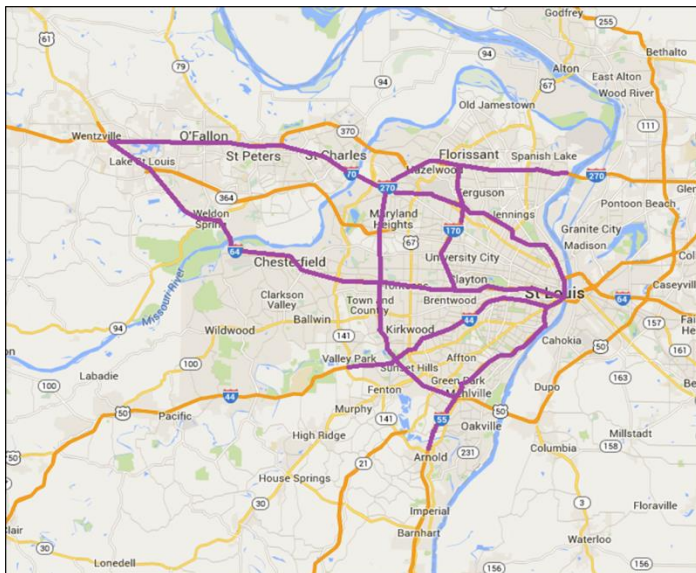
Major traffic incidents are typically traffic incidents involving hazardous materials, fatal traffic crashes involving numerous vehicles, and other natural or man-made disasters. These traffic incidents typically involve closing all or part of a roadway facility for a period exceeding 2 hours.

### **Moderate Impact Traffic Incident – Blocked travel lanes/closure 30 min – 2 hours**

Moderate traffic impact incidents typically affect travel lanes for a time period of 30 minutes to 2 hours, and usually require traffic control on the scene to divert road users past the blockage. Full roadway closures might be needed for short periods during traffic incident clearance to allow traffic incident responders to accomplish their tasks.

### **Minor Impact Traffic Incident – Lane closures < 30 minutes**

Minor traffic incidents are typically disabled vehicles and minor crashes that result in lane closures of less than 30 minutes. On-scene responders are typically law enforcement and towing companies, and occasionally highway agency service patrol vehicles.



**NEW for 2017! The focus area for calculating the average 24 hour volumes was revisited to include all SL District Urban Freeways including Route 364 from I-64 to I-270, Route 367 from I-270 to Route 67, and Route 370 from I-70 to I-270. Starting in 2017, these freeways will be included in this calculation while 2013-2016 will be based on the original urban interstate calculation.**



## **Definitions**

**ACTRA** – Traffic signal management software program

**Alert** – Email message sent regarding an incident or event on the roadway

**Arterial** – Missouri State Highway Numbered Routes, not fully access controlled

**Arterial Device** – ITS equipment located along MoDOT arterials

**Defined Sensor** – A single sensor with an individual ID focused on a particular roadway; multiple defined sensors may be located at one physical sensor location

**DMS** – Dynamic Message Signs along highway displaying incident and travel time information

**DNR** – Department of Natural Resources

**Driver messaging** – Messages placed on DMS boards to alert drivers of incidents ahead of their direction of travel

**EOC** – Emergency Operations Center operated by MoDOT in Jefferson City

**EMS** – Emergency Medical Services

**ER** – MoDOT's Emergency Response units that provide emergency assistance, incident management and traffic control to mitigate incidents and restore free flow traffic within the St. Louis region

**Freeway Device** – ITS device located along a MoDOT freeway, such as interstates and other fully access controlled highways

**Gatewayguide.com** – Gateway Guide's website for local St. Louis area traffic information

**GGL** – Gateway Green Light is the St. Charles County regional integrated corridor management for a cooperative multi-jurisdictional effort to better manage and coordinate travel on the interstates (I-70, I-64), state routes (MO 94, MO 364, MO 370, US 61) and local arterials through the installation of Intelligent Transportation Systems (ITS) in Cottleville, Dardenne Prairie, Lake St. Louis, O'Fallon, St. Charles, St. Peters, and Wentzville.

**GuidePost** – Area of report highlighting important mobility topics for the month

**IDOT** – Illinois Department of Transportation

**KC Scout** – Gateway Guide's counterpart for the greater Kansas City Metropolitan area, a collaboration involving both MoDOT and the Kansas DOT

**Mobility** – Ease of movement over roadway, through system, and or work zone

**MRB** – Mississippi River Bridge under construction north of downtown St. Louis

**MSHP** – Missouri State Highway Patrol

**Observed Work zone** – Work zone tracked by traffic cameras at the TMC



## DATA KEY

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**Peak Average** – Daily speed sensor readings over an entire weekday average commute period averaged for an entire month

**PSB** – Poplar Street Bridge

**Regional Mobility Overview** – Map depicting congestion areas based on speed index ratings derived from speed sensor readings

**SL** – Designation for the St. Louis District

**Speed Index** – a ratio of the speed at which vehicles travel during a period to the speed at free-flow conditions

**Stats to Watch** – Area of report highlighting interesting trends for the report month, or data to be closely followed

**STLtraffic** – Email group consisting of Gateway Guide personnel and Gateway Guide's media partners, messages sent to the group are also posted on Twitter

**TMC** – Traffic Management Center (also referred to as Gateway Guide)

**TMC Alert** – Email alert sent to an internal group of Gateway Guide personnel

**TMS** – Traveler Map System is MoDOT's internal software for entering work zones and road conditions to populate the Traveler Information Map at [www.traveler.modot.org/map](http://www.traveler.modot.org/map)

**Travel Time Index** – A ratio of the actual time to travel a corridor compared to travel time at posted speed limit without stops used

**User Delay Costs** – Puts a dollar amount on how much a road's performance impacts its users. Combines probe speed data with volume data provided by the Texas Transportation Institute to estimate the cost of delay experienced by drivers as a result of congestion. Vehicle costs used are Passenger Vehicle = \$17.67 and Commercial Vehicle = \$68.09.

**Visibility** – Concerning placement of traffic signs, signals, devices, barricades and warning lights for safety within work zone or construction area to help motorist and workers move within a work zone safely; Clearly visible and legible, distinguishable to approaching traffic during day and night, aligned with road user's line of vision, and positioned as to not obstruct other applicable traffic control devices. Must meet MUTCD standards for condition and must be covered, turned or properly stowed when not in use.

**Zoning In** – section of report highlighting important construction topics for the report month



## I-70 Mile Markers

ST. CHARLES COUNTY		I-70 DISTRICT 6 WESTBOUND I-70 DISTRICT 6 EASTBOUND	ST. CHARLES COUNTY	
5TH ST SOUTH (ST. CHARLES)	229A		229A	5TH ST SOUTH (ST. CHARLES)
5TH ST NORTH (ST. CHARLES)	229B		229B	5TH ST NORTH (ST. CHARLES)
ST. LOUIS COUNTY			ST. LOUIS COUNTY	
BLANCHETTE BRIDGE	230		230	BLANCHETTE BRIDGE
EARTH CITY EXPRESSWAY SOUTH	231A		231A	EARTH CITY EXPRESSWAY SOUTH
EARTH CITY EXPRESSWAY NORTH	231B		231B	EARTH CITY EXPRESSWAY NORTH
I-270	232		232	I-270
MCKELVEY RD OVERPASS (BRIDGETON)	233		233	MCKELVEY RD OVERPASS (BRIDGETON)
RTE 180/ST. CHARLES ROCK RD (BRIDGETON)	234		234	RTE 180/ST. CHARLES ROCK RD (BRIDGETON)
US 67 SOUTH (BRIDGETON)	235A		235A	US 67 SOUTH (BRIDGETON)
US 67 NORTH (BRIDGETON)	235B		235B	US 67 NORTH (BRIDGETON)
CYPRESS RD (BRIDGETON)	235C		235C	CYPRESS RD (BRIDGETON)
AIRFLIGHT (ST. ANN)	236		236	AIRFLIGHT (ST. ANN)
MCDONNELL OVERPASS (BERKELEY)	237		237	MCDONNELL OVERPASS (BERKELEY)
LAMBERT AIRPORT (BERKELEY)	238A		238A	LAMBERT AIRPORT (BERKELEY)
I-170 NORTH (BERKELEY)	238B		238B	I-170 NORTH (BERKELEY)
I-170 SOUTH (BERKELEY)	238C		238C	I-170 SOUTH (BERKELEY)
NORTH HANLEY (BERKELEY)	239		239	NORTH HANLEY (BERKELEY)
RTE N/FLORISSANT RD (COOL VALLEY)	240A		240A	RTE N/FLORISSANT RD (COOL VALLEY)
BERMUDA DR (NORMANDY)	240B		240B	BERMUDA DR (NORMANDY)
RTE U/LUCAS AND HUNT RD	241B		241B	RTE U/LUCAS AND HUNT RD
JENNINGS STATION RD (PINE LAWN)	242C		242C	JENNINGS STATION RD (PINE LAWN)
ST. LOUIS CITY			ST. LOUIS CITY	
GOODFELLOW (ST. LOUIS)	243A		243A	GOODFELLOW (ST. LOUIS)
RIVERVIEW/BIRCHER (ST. LOUIS)	243B	243B	RIVERVIEW/BIRCHER (ST. LOUIS)	
UNION (ST. LOUIS)	244A	244A	UNION (ST. LOUIS)	
KINGSHIGHWAY (ST. LOUIS)	244B	244B	KINGSHIGHWAY (ST. LOUIS)	
SHREVE (ST. LOUIS)	245A	245A	SHREVE (ST. LOUIS)	
WEST FLORISSANT AVE (ST LOUIS)	245B	245B	WEST FLORISSANT AVE (ST LOUIS)	
NORTH BROADWAY (ST. LOUIS)	246A	246A	NORTH BROADWAY (ST. LOUIS)	
ADELAIDE (ST LOUIS)	246B	246B	ADELAIDE (ST LOUIS)	
GRAND (ST. LOUIS)	247	247	GRAND (ST. LOUIS)	
SALISBURY (ST LOUIS)	248A	248A	SALISBURY (ST LOUIS)	
BRANCH (ST LOUIS)	248B	248B	BRANCH (ST LOUIS)	
MADISON (ST LOUIS)	249A	249A	MADISON (ST LOUIS)	
PINE ST OVERPASS (ST LOUIS)	250	250	PINE ST OVERPASS (ST LOUIS)	
CHESTNUT ST OVERPASS (ST LOUIS)	250	250	CHESTNUT ST OVERPASS (ST LOUIS)	
MARKET ST OVERPASS (ST. LOUIS)	250	250	MARKET ST OVERPASS (ST. LOUIS)	
WALNUT ST OVERPASS (ST LOUIS)	250	250	WALNUT ST OVERPASS (ST LOUIS)	



# DATA KEY

## I-70 St. Charles County Mile Markers

RTE A (WENTZVILLE)	212	I-70 DISTRICT 6 EASTBOUND	I-70 DISTRICT 6 WESTBOUND	212	RTE A (WENTZVILLE)
LAKE ST. LOUIS BLVD (LAKE ST. LOUIS)	214			214	LAKE ST. LOUIS BLVD (LAKE ST. LOUIS)
BRYAN RD (O'FALLON)	216			216	BRYAN RD (O'FALLON)
RTE K/RTE M (O'FALLON)	217			217	RTE K/RTE M (O'FALLON)
T.R. HUGHES BLVD (O'FALLON)	218			218	T.R. HUGHES BLVD (O'FALLON)
RTE 79 (ST. PETERS/O'FALLON)	220			220	RTE 79 (ST. PETERS/O'FALLON)
RTE C/MID RIVERS MALL DR (ST. PETERS)	222			222	RTE C/MID RIVERS MALL DR (ST. PETERS)
SPENCER RD OVERPASS (ST. PETERS)	223			223	SPENCER RD OVERPASS (ST. PETERS)
RTE 370 (ST. PETERS)	224			224	RTE 370 (ST. PETERS)
CAVE SPRINGS (ST. CHARLES)	225			225	CAVE SPRINGS (ST. CHARLES)
ZUMBEHL RD (ST. CHARLES)	227			227	ZUMBEHL RD (ST. CHARLES)
HAWK'S NEST OVERPASS (ST. CHARLES)	227			227	HAWK'S NEST OVERPASS (ST. CHARLES)
RTE 94 (ST. CHARLES)	228			228	RTE 94 (ST. CHARLES)
5TH ST SOUTH (ST. CHARLES)	229A			229A	5TH ST SOUTH (ST. CHARLES)
5TH ST NORTH (ST. CHARLES)	229B			229B	5TH ST NORTH (ST. CHARLES)

## I-270 Mile Markers

3	KOCH RD	I-255 WESTBOUND I-255 EASTBOUND I-270 DISTRICT 6 COUNTER CLOCKWISE FROM RIVERVIEW DR. TO I-55 I-270 DISTRICT 6 CLOCKWISE FROM I-55 TO RIVERVIEW DR.	KOCH RD	3
2	SR 231 (TELEGRAPH RD)		SR 231 (TELEGRAPH RD)	2
1C	US61-67		US61-67	1B
1B	<b>I-55 NORTH</b>		<b>I-55 NORTH</b>	1B
1	<b>I-55 SOUTH</b>		<b>I-55 SOUTH</b>	1A
2	SR 21 (TESSON FERRY RD.)		SR 21 (TESSON FERRY RD.)	2
3	SR 30 (GRAVOIS RD.)		SR 30 (GRAVOIS RD.)	3
5	I-44 EAST/SR 366 (WATSON RD.)		<b>I-44 EAST</b>	5
5	<b>I-44 WEST</b>		<b>I-44 WEST</b>	5
			BIG BEND RD.	7
8	DOUGHERTY FERRY RD.		DOUGHERTY FERRY RD.	8
10	SR 100 (MANCHESTER RD.)		SR 100 (MANCHESTER RD.)	10
12	I-64 EAST/WEST/US 40-61 NORTH/SOUTH		I-64 EAST/WEST/US 40-61 NORTH/SOUTH	12 A/B
13	SR AB (LADUE RD)		SR AB (LADUE RD)	13
14	SR 340 (OLIVE BLVD)		SR 340 (OLIVE BLVD)	14
16	SR D (PAGE AVE.) EAST		SR D (PAGE AVE.) EAST	16A
16	SR 364 WEST		SR 364 WEST	16B
17	DORSETT RD		DORSETT RD	17
20	<b>I-70 WEST/EAST</b>		<b>I-70 WEST</b>	20B
			<b>I-70 EAST</b>	20A
20C	SR 180 (ST. CHARLES ROCK RD)		SR 180 (ST. CHARLES ROCK RD)	20C
22	MISSOURI BOTTOM RD/370 WEST		SR 370 WEST	22D
23	MCDONNELL BLVD		MCDONNELL BLVD	23
25A	US 67 SOUTH		US 67 NORTH	25A
25B	US 67 NORTH		US 67 SOUTH	25B
26	HANLEY/GRAHAM RD.		<b>I-170 SOUTH (EXIT LEFT)</b>	26A
26	<b>I-170 SOUTH</b>		HANLEY/GRAHAM	26B
27	NEW FLORISSANT RD		NEW FLORISSANT RD	27
28	WASHINGTON/ELIZABETH RD.		ELIZABETH/WASHINGTON	28
29	WEST FLORISSANT RD		WEST FLORISSANT RD	29
30	SR AC HALLS FERRY RD		SR AC NEW HALLS FERRY RD	30
			NEW HALLS FERRY RD.	30A
31A	<b>SR 367 SOUTH</b>		<b>SR 367 SOUTH</b>	31A
31B	<b>SR 367 NORTH</b>		<b>SR 367 NORTH</b>	31B
32	BELLEFONTAINE RD		BELLEFONTAINE RD	32
33	LILAC AVE.		LILAC AVE.	33
34	RIVERVIEW DR.		RIVERVIEW DR.	34



# DATA KEY

## I-64 Mile Markers

<b>I-70 WEST EXIT RIGHT/EAST EXIT LEFT</b>	1		1A	<b>I-70 WEST</b>
			1B	<b>I-70 EAST</b>
PROSPECT RD	1C		1C	PROSPECT RD
LAKE ST. LOUIS BLVD	2		2	LAKE ST. LOUIS BLVD
SR N	4		4	MO N
SR DD/WINGHAVEN	6		6	MO DD/Winghaven
SR K/SR 94	9		9	MO K
			10	MO 94
MISSOURI RESEARCH PARK/TECHNOLOGY DR	12		11	RESEARCH PARK CRL
DANIEL BOONE BRIDGE	13		13	DANIEL BOONE BRIDGE
CHESTERFIELD AIRPORT RD	14		14	SPIRIT OF ST LOUIS BLVD
			16	LONG RD
BOONE'S CROSSING	17		17	BOONE'S CROSSING
CHESTERFIELD PKWY	19A		19A	CHESTERFIELD PKWY
SR 340 (OLIVE/CLARKSON)	19B		19B	MO 340 (OLIVE/CLARKSON)
			20	CHESTERFIELD PKWY
TIMBERLAKE MANOR PKWY	21		21	TIMBERLAKE MANOR PKWY
SR 141	22		22	MO 141 (WOODS MILL RD)
MASON RD	23		23	MARYVILLE CENTRE DR
			24	MASON RD
<b>I-270 SOUTH</b>	25A		25A	<b>I-270 SOUTH</b>
<b>I-270 NORTH</b>	25B		25B	<b>I-270 NORTH</b>
SR JJ (BALLAS RD)	26		26	MO JJ (BALLAS RD)
SPOEDE RD	27		27	SPOEDE RD
US 61-67	28A		28A	US 61-67
			28B	CLAYTON RD
MCKNIGHT RD	30		30	MCKNIGHT RD
BRENTWOOD/HANLEY RD	31B		31A	<b>I-170 NORTH</b>
<b>I-170 NORTH</b>	31A		31B	HANLEY RD/BRENTWOOD BLVD
BELLEVUE AVE	33B			
BIG BEND	33A		33A	BIG BEND BLVD
MCCAUSLAND	33C			<b>ST. LOUIS CITY</b>
<b>ST. LOUIS CITY</b>			33C	MCCAUSLAND AVE
HAMPTON AVE/OAKLAND AVE	34B		34A	CLAYTON RD/SKINKER BLVD
			34B	HAMPTON AVE
KINGSHIGHWAY	36A		36A	KINGSHIGHWAY
VANDEVENTER AVE	36C		36B	BOYLE
MARKET ST/BERNARD ST	37A			
GRAND AVE	37B			
JEFFERSON AVE	38A		38A	FOREST PARK AVE/GRAND BLVD
CHESTNUT AT 20TH ST	38B		38B	MARKET ST AT 3000 WEST
14TH ST	39B		39A	MARKET ST AT 21ST
11TH ST EXIT LEFT	39C		40A	STADIUM/9TH ST/ TUCKER BLVD
BROADWAY/7TH ST (LAST MISSOURI EXIT)	40B		40C	<b>I-44 WB/I-55 SB/ I-70 WB</b>

I-64 DISTRICT 6 EASTBOUND

I-64 DISTRICT 6 WESTBOUND



## I-55 Mile Markers

JEFFERSON COUNTY		I-55 DISTRICT 6 NORTHBOUND I-55 DISTRICT 6 SOUTHBOUND	JEFFERSON COUNTY	
RTE M	185		185	RTE M
MAIN ST(IMPERIAL)	186		186	MAIN ST(IMPERIAL)
RICHARDSON RD (ARNOLD)	190		190	RICHARDSON RD (ARNOLD)
RTE 141 (ARNOLD)	191		191	RTE 141 (ARNOLD)
ST. LOUIS COUNTY			ST. LOUIS COUNTY	
MERAMEC BOTTOM RD	193		193	MERAMEC BOTTOM RD
BUTLER HILL RD	195		195	BUTLER HILL RD
I-255 EAST	196A		196A	I-255 EAST
I-270 NORTH	196B		196B	I-270 NORTH
US67/LINDBERGH	197		197	US67/LINDBERGH
REAVIS BARRACKS RD	199		199	REAVIS BARRACKS RD
UNION RD	200		200	UNION RD
BAYLESS	201A		201A	BAYLESS
WEBER RD	201B		201B	WEBER RD
ST. LOUIS CITY			ST. LOUIS CITY	
GERMANIA (ST. LOUIS)	202B		202B	GERMANIA (ST. LOUIS)
LOUGHBOROUGH AVE (ST. LOUIS)	202C		202C	LOUGHBOROUGH AVE (ST. LOUIS)
BATES (ST. LOUIS)	203		203	BATES (ST. LOUIS)
BROADWAY (ST. LOUIS)	204		204	BROADWAY (ST. LOUIS)
GASCONADE (ST. LOUIS)	205		205	GASCONADE (ST. LOUIS)
ARSENAL (ST. LOUIS)	206C		206C	ARSENAL (ST. LOUIS)
SIDNEY OVERPASS	206		206	SIDNEY OVERPASS
GRAVOIS AVE OVERPASS	207		207	GRAVOIS AVE OVERPASS
I-44 WEST (ST. LOUIS)	207		207	I-44 WEST (ST. LOUIS)
7TH ST/PARK AVE (ST. LOUIS)	208		208	7TH ST/PARK AVE (ST. LOUIS)

## I-44 Mile Markers

FRANKLIN COUNTY		I-44 DISTRICT 6 WESTBOUND I-44 DISTRICT 6 EASTBOUND	FRANKLIN COUNTY	
PACIFIC	257		257	PACIFIC
ST. LOUIS COUNTY			261	ALLENTON/SIX FLAGS
ALLENTON/SIX FLAGS	261		ST. LOUIS COUNTY	
RTE 109/RTE W	264		264	RTE 109/RTE W
WILLIAMS RD	265			
LEWIS RD	266		266	LEWIS RD
			269	ANTIRE
RTE 141	272		272	RTE 141
BOWLES	274		274	BOWLES
MRAZ	274			
			275	SOCCER PARK
I-270 NORTH	276B		276B	I-270 NORTH
I-270 SOUTH	276A		276A	I-270 SOUTH
RTE 366/WATSON	277A			
US 67/LINDBERGH	277B		277B	US 67/LINDBERGH
BIG BEND	278		278	BIG BEND
			279	BERRY
ELM	280		280	ELM
LACLEDE STATION	282			
ST. LOUIS CITY			283	SHREWSBURY
JAMIESON	284A		ST. LOUIS CITY	
			284B	ARSENAL
			285	SOUTHWEST
HAMPTON	286		287	KINGSHIGHWAY
KINGSHIGHWAY	287		288	GRAND AVE
GRAND AVE	288		289	JEFFERSON AVE
JEFFERSON AVE	289			
I-55 SOUTH	290A			
18TH ST	290B		290C	12TH ST./GRAVOIS

## I-170 Mile Markers

I-64 WEST/US 40-61	1A	I-170 DISTRICT 6 SOUTHBOUND	I-170 DISTRICT 6 NORTHBOUND	
I-64 EAST/US 40-61	1B			
				1C GALLERIA PARKWAY
BRENTWOOD BLVD	1D			
FOREST PARK PARKWAY	1E			1E FOREST PARK PARKWAY
LADUE RD	1F			1F LADUE RD
DELMAR	2			2 DELMAR
EAST/3B WEST SR 340 (OLIVE BLVD)	3A			3 SR 340 (OLIVE BLVD)
SRD/SR 364 (PAGE AVE)	4			4 SR D/SR 364 (PAGE AVE)
SR 180 (ST. CHARLES ROCK RD)	5			5 SR 180 (ST. CHARLES ROCK RD)
SR 115 (NATURAL BRIDGE RD)	6			6 SR 115 (NATURAL BRIDGE RD)
I-70 EAST (EXIT LEFT)	7A			7A I-70 EAST (EXIT RIGHT)
I-70 WEST (EXIT RIGHT)	7B			7B I-70 WEST (EXIT LEFT)
				7C LAMBERT ST. LOUIS AIRPORT
SCUDDER	8			8 SCUDDEN/N. HANLEY RD
AIRPORT RD	9A			9A AIRPORT
				9B BOEING (EXIT LEFT)
				9C N. HANLEY RD
				10A I-270 WEST (EXIT RIGHT)
				10B I-270 EAST (EXIT LEFT)

## SR 364 Mile Markers

		SR 364 WESTBOUND	SR 364 EASTBOUND	11B	HARVESTER RD
				12	HERITAGE CROSSING/JUNGS STATION RD
SR94 EAST/ST. CHARLES	13			13	SR 94 EAST/MUEGGE RD
ARENA PKWY/UPPER BOTTOM RD	14			14	UPPER BOTTOM/ARENA
MARYLAND HEIGHTS EXPRESSWAY	17			17	MARYLAND HEIGHTS EXPRESSWAY
BENNINGTON PL	19				
				21	BENNINGTON PL
I-270 SOUTH	22A				
I-270 NORTH	22B				

## SR 370 Mile Markers

		SR 370 WESTBOUND SR 370 EASTBOUND	1A	I-70 WESTBOUND
			1B	I-70 EASTBOUND
			1C	SPENCER RD
TRUMAN/CAVE SPRINGS RD	2		2	TRUMAN/CAVE SPRINGS RD
ELM/NEW TOWN BLVD	5		5	ELM/NEW TOWN BLVD
N 3RD ST/SR 94	7		7	N 3RD ST/SR 94
DISCOVERY BRIDGE ST. CHAS CO/ ST. LOUIS CO	8		8	DISCOVERY BRIDGE ST. LOUIS CO/ ST. CHAS CO
EARTH CITY EXPRESSWAY	9		9	EARTH CITY EXPRESSWAY
ST. LOUIS MILLS BLVD	11		11	ST. LOUIS MILLS BLVD
MISSOURI BOTTOM RD	12			
I-270 WEST BOUND	12			
I-270 EAST BOUND	12			

## SR 21 Mile Markers

RT B	164.8	SR 21 NORTHBOUND SR 21 SOUTHBOUND	164.8	RT B
RT BB	165.4		165.4	RT BB
STADIUM DR UNDERPASS	166.4		166.4	STADIUM DR UNDERPASS
RTE A	167.8		167.8	RTE A
SAND CREEK	169		169	SAND CREEK
HAYDEN RD	169.2		169.2	HAYDEN RD
GLADE CHAPEL RD OVERPASS	171.4		171.4	GLADE CHAPEL RD OVERPASS
OLD HWY 21 (GOLDMAN)	172.6		172.6	OLD HWY 21 (GOLDMAN)
KLABLE RD OVERPASS	174.2		174.2	KLABLE RD OVERPASS
SCHENK RD OVERPASS	175.2		175.2	SCHENK RD OVERPASS
HEADS CREEK	176.4		176.4	HEADS CREEK
RT MM	177.7		177.7	RT MM
W. FOUR RIDGE RD OVERPASS	179		179	W. FOUR RIDGE RD OVERPASS
OLD HWY 21 (SHADY VALLEY)	180.4		180.4	OLD HWY 21 (SHADY VALLEY)
OLD HWY 21 UNDERPASS	182		182	OLD HWY 21 UNDERPASS
WEST ROCK CREEK RD OVERPASS	182.8		182.8	WEST ROCK CREEK RD OVERPASS
OLD HWY 21 OVERPASS	183.2		183.2	OLD HWY 21 OVERPASS
LONDELL RD	184.2		184.2	LONDELL RD
OLD HWY 21	184.5		184.5	OLD HWY 21
SR 141	185.6		185.6	SR 141